

CRS Mbeere Child Survival Project Detailed Implementation Plan

Catholic Relief Services

Location: Mbeere District, Kenya

Cooperative Agreement No. HFP-A-00-02-00041-00

Beginning Date: October 1, 2002

End Date: September 30, 2007

DIP Submission Date: April 17, 2003

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AIDS	Acquired Immune Deficiency Syndrome	IMR	Infant Mortality Rate
ARI	Acute Respiratory Infections	IR	Intermediate Result
BCC	Behavior Change Communication	ITN	Insecticide-Treated bed net
BHR/PVC	Bureau of Humanitarian Response, Office of Private & Voluntary Cooperation	KDHS	Kenya Demographic & Health Survey
CB	Capacity Building	KEMRI	Kenya Medical Research Institute
CBMS	Community-based monitoring system	KEPI	Kenya Expanded Program for Immunization
CDD	Control of Diarrheal Diseases	KFSC	Kenya Food Security Consortium
CHU	Community Health Unit	KSh	Kenya Shilling
CHW	Community Health Worker	LAM	Lactation Ammenorrhea Method
CRS	Catholic Relief Services	LOP	Life of Project
CS	Child Survival	MCH	Maternal Child Health
CSP	Child Survival Project	MCSP	Mbeere Child Survival Program
C-IMCI	Community IMCI	MEDS	Mission for Essential Drug Supplies
CORE	CS Collaboration & Resources Group	MoA	Ministry of Agriculture
CORPS	Community's Own Resource Persons	MoEST	Ministry of Education, Science & Technology
CR	Country Representative	MoH	Ministry of Health
CSTS	Child Survival Technical Support Project	MOH	Medical Officer of Health
CU5	Children under 5 years	MOU	Memorandum of Understanding
DAP	Detailed Activity Plan	MoWR	Ministry of Water Resources
DHC	Dispensary Health Committee	MTCT	Mother to child transmission
DHMT	District Health Management Team	NASCOP	National AIDS/STD Control Program
DIP	Detailed Implementation Plan	NGO	Non-Governmental Organization
DSSD	Development & Social Services Department, Diocese of Embu	PCBD	Peace and Capacity Building Dept.
EARO	East Africa Regional Office	PCM	Pneumonia Case Management
EPI	Expanded Program on Immunization	PMCT	Prevention of Mother to Child Transmission
EOP	End Of Project	PMO	Provincial Medical Officer
FACS	Food Assisted Child Survival	PQSD	Program Quality & Support Department (CRS HQ)
FGD	Focus Group Discussion	RCQHC	Regional Center for Quality of Health Care
FP	Family Planning	RH	Reproductive Health
GoK	Government of Kenya	SCM	Standard Case Management
HFA	Health Facility Assessment	SP	Sulfadoxine/Pyrimethamine (Fansidar)
HIS	Health Information System	STA	Senior Technical Advisor
HIV	Human Immunodeficiency Virus	TBA	Traditional Birth Attendant
HQ	Headquarters	ToT	Training of Trainers
IEC	Information, Education & Communication	TT	Tetanus Toxoid
IHAP	Integrated Health & Agriculture Program	UNDP	United Nations Development Program
IMCI	Integrated Management of Childhood Illnesses	USCCB	United States Conference of Catholic Bishops
		VCT	Voluntary Counseling & Testing
		VHC	Village Health Committee
		WHO	World Health Organization
		WRA	Women of Reproductive Age

A. Executive Summary

The Mbeere Child Survival Project targets one of the most deprived districts in Eastern Province. Established as a new distinct operational entity in 1996, the district has an estimated total population of 173,000 with 31,140 children under 5 years and 78,957 women between 15-49 years. Ninety percent (90%) of the population is Christian, evenly divided between Catholics and Anglicans. The two main ethnic groups in the project area are the Mbeere (who speak Kimbeere), and Kamba (who speak Kikamba). The Mbeere is the largest group. The proposed project area covers Gachoka and Mwea, the southern most divisions of the district covering 67% of the total district area. The area is underdeveloped and is characterized as a low potential dry zone primarily with subsistence agriculture. There are two rainy seasons, but even during a year with normal rainfall, households in the area have food shortages for at least 3 –4 months of the year. The main food crops are maize, beans and millet; the main cash crops grown include cotton, tobacco, and sunflower. All households experience a lack of green vegetables in their diets for about seven months each year, during the dry seasons.¹ Livestock reared include cattle, sheep, goats, and poultry.

Since 1991, there has been a general decline in yields for most of the food crops grown in the district² as well as from livestock and its products.³ Over 65 percent of the people in Mbeere District fall below the poverty line, exceeding the national average of 50 percent.⁴ Out-migration of adult males in search of paid employment is becoming more common as part of household livelihood strategies, and, as a result, the major burden of sustaining the family is left to the woman.

Demographic and health statistics confirm the marginalization of the proposed project area in addition to reports of a steady worsening of national under 5 mortality rates over the past 10 years, counteracting decades of improvement. Between 1989 and 1999 alone, child mortality rates increased by 25% in Kenya⁵. At 118 per thousand live births, Kenya has 37th highest child mortality rate in the world. The IMR is estimated at 76/1000 live births.⁶ In Mbeere District, the under 5-mortality rate is 119/1000 and the IMR is 71/1000.⁷ Health priorities in children under 5 in the project area are: malaria, pneumonia, and malnutrition with 40% of health facility based morbidity in children under 5 is due to malaria. Health facilities are limited. The doctor to patient ratio is 1:100,000 people in Eastern Province, which is ten times lower than the national ratio of 1: 10,000 people.⁸ With only 1.29 hospital beds per 1000 people in the province as a

¹ A.J. Sutherland et al., "Household food security in Semi-arid Africa: The contribution of Participatory Adaptive research and Development to Rural Livelihood in Eastern Kenya," Food Policy, Volume 24, 1999, p. 371

² Mbeere District Development Plan 1997-2001. Rural Planning Department, Ministry of Planning and National Development. P. 20.

³ Mbeere District Development Plan 1994

⁴ CRS Kenya appraisal mission, February 2000

⁵ USAID/Kenya Integrated Strategic Plan, 2001-2005, p.106

⁶ Kenya Demographic Health Survey, 1998. Central Bureau of Statistics, 1999.

⁷ Central Bureau of Statistics, Mbeere District

⁸ Ibid. p. 37.

whole (19% less than national average of 1.6 per 1000)⁹, it ranks lowest in the nation in health service coverage.¹⁰

GOAL: To sustainably reduce under 5 mortality and morbidity in the Divisions of Mwea and Gachoka of Mbeere District by improving the capacity of caretakers and health care providers to prevent and manage targeted childhood illnesses.

Project Beneficiaries	
<i>Target</i>	<i>Population</i>
Children Under 5 Years Old	17,960
Women of Reproductive Age	42,805

The fundamental program approach is to mobilize communities to improve their health knowledge and caretaker practices and to develop links with better quality health facility services. Major strategies will utilize approaches embodied within community and facility IMCI. CRS will achieve the above goal by increasing the capacity of its partner, the Development and Social Services Department of Embu Catholic Diocese through improved technical and management skills as well as collaboration and strengthening of government services. The MCSP strategically builds on a wider effort to support the implementation of IMCI, establish VCT centers to improve HIV testing services for mothers, and to strengthen community level ability to address their own health needs.

The project will focus on four key child survival interventions:

- Control of Malaria (30%)
- Nutrition and Micronutrients (30%)
- Pneumonia Case Management (25%)
- HIV/AIDS (15%)

Key outcome objectives will be improved caretaker knowledge of prevention and management of malaria and pneumonia, complemented by improved nutrition through better nutritional practices and micronutrient supplementation. HIV/AIDS interventions will focus on improving knowledge of maternal to child transmission and establishing 2 VCT sites with PMTCT services.

In addition to direct project implementation through DSSD, CRS/Kenya plans to work in partnership with Population Services International in a social marketing program for insecticide treated bednets (ITN) and through Community Health Workers trained by PLAN International. The MCSP further complements CRS/Kenya activities in the area through its USAID funded Integrated Health and Agriculture Program, (IHAP)¹¹.

Project Profile:

Local NGO partner: Development & Social Services Department
Embu Catholic Diocese

Local Government Partner: Mbeere District Ministry of Health

Application category: New

⁹ 2001 World Development Indicators. P. 100.

¹⁰ Central Bureau of statistics, Ministry of Finance and Planning, "Statistical Abstract: 1998," p.225.

¹¹ 2002 Integrated Health and Agriculture Program (IHAP)_ Fiscal Year Results Report

Project Timeframe:	October 1, 2002 – September 30, 2007
5- Year Level of Funding:	\$ 1,831,247
USAID Representative:	Dr. Sheila Macharia
Primary Authors:	Kinyanjui Kaniaru (CRS/Kenya Community Health Manager) Dr. Carmela Green Abate (Health & HIV/AIDS STA CRS/EARO), Dr. Alfonso Rosales (Health STA CRS/HQ), Kristin Weinbauer (Health Program Specialist CRS/HQ), Yvonne Ferguson (CRS/Kenya HIV/AIDS Manager), Washington Omwomo (M&E Officer CHU CRS/Kenya), George Okoth (MCSP Project Manager CRS/Kenya)
CRS/Baltimore contact:	Alfonso Rosales

B. CSHGP Data Form / Rapid CATCH Indicators

*CSHGP Form is available in paper copy of DIP or on-line at
<http://www.childsurvival.com/projects/dipform/login.cfm>

PRIORITY CHILD HEALTH INDICATORS*Sentinel Measure of Child Health and Well-being:*

1. Percentage of children age 0 – 23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population) **15.4%**

Prevention of Illness/Death:

2. Percentage of children age 0 – 23 months whose births were attended by skilled health personnel. **30.9%**
3. Percentage of mothers with children age 0 – 23 months who received at least two Tetanus Toxoid injections before the birth of their youngest child. **17.1%**
4. Percentage of children 0 – 5 months who were exclusively breastfed during the last 24 hours. **0%**
5. Percentage of children age 12 – 23 months who were fully vaccinated (against the five vaccine-preventable diseases) before the first birthday. **62.4%**
6. Percentage of children age 12 – 23 months who received a measles vaccine. **91%**
7. Percentage of children age 0 – 23 months who slept under an insecticide-treated net (in malaria risk areas) the previous night. **9.6%**
8. Percentage of mothers with children 0 – 23 months who cite at least two known ways of reducing the risk of HIV infection. **30%**
9. Percentage of mothers with children age 0 – 23 months who report that they wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated. **0.3%**

Management/Treatment of Illness:

10. Percentage of mothers of children age 0 – 23 months who know at least two signs of childhood illness that indicate the need for treatment. **68.4%**
11. Percentage of sick children age 0 – 23 months who received increased fluids and continued feeding during an illness in the past two weeks. **7.1%**

No information was collected on the following 2 indicators:

1. Percentage of children age 0 – 23 months who were born at least 24 months after the previous surviving child.
2. Percentage of children age 6 – 9 months who received breast milk and complementary foods during the last 24 hours. (Complementary are defined as: mashed, pureed, solid, or semi-solid foods). Direct question on this was not included in the survey questionnaire.

C. Description of the DIP Preparation Process

A participatory approach was used during the DIP preparation. The team assembled for the DIP preparation included members from the Community Health and HIV/AIDS Units CRS/Kenya, the Diocese of Embu Child Survival Team, and CRS Technical Advisory staff from HQ and EARO. Two stakeholder meetings were held at national and district level. The first meeting was at the national level in Nairobi, Kenya and included participants from USAID, WHO, UNICEF, MoH, and the University of Nairobi as well the Development Director of the local partner, DSSD. For a full list of participants, see Table 1.

The second stakeholder 1-day planning meeting was held in Embu and facilitated by the Head of the Development and Social Services Department of the Diocese of Embu (DSSD). Participation at both of these meetings included government, other NGO partners, USAID, WHO, UNICEF and the University of Nairobi. (See Tables 1 and 2 for list of participants). The meetings reviewed the project proposal, discussed major KPC findings, suggested project modifications and confirmed roles and responsibilities by organization for various stakeholders and identified project challenges. It was agreed that a Memorandum of Understanding would be developed and signed between the DSSD and District MoH.

The major preparatory steps prior to these two stakeholder meetings were:

- Conducting a Baseline Survey and other Assessments. A KPC Baseline survey was carried out in November/December 2002 based on the KPC 2000+ questionnaire format. This was supplemented by focus group discussions (FGDs) to clarify some issues that arose from the KPC data. The summary of the KPC findings are shown in Section 2 and attached in full as Annex 3.
- A Training Needs Assessment that included a review of job descriptions, organizational chart, staffing and financial procedures for the Diocese was carried out in February 2003. A summary is attached as Annex 4.
- CRS/Kenya and DSSD recruited project staff.
- 2 stakeholder meetings as described in the section describing the DIP Preparation Process.
- A half-day follow up meeting with representatives from WHO, NASCOP and MoH to clarify agency recommendations including additional guidance on government guidelines related to MCSP intervention areas.
- A meeting with the PSI technical advisor, Ms Dana Tilson was held to define collaboration on procurement and social marketing training for insecticide-treated bed nets (ITNS) and roles and responsibilities for collaboration.
- Actual preparation of the DIP took place with the core team over a period of three weeks and was facilitated by the DIP team leader, the CRS/EARO Health STA and the CRS/HQ Health STA. A review of the objectives, indicators and strategies was undertaken in light of the KPC findings. Objectives and indicators were modified. Project interventions were reassessed and a detailed activity plan developed.

Follow-Up Activities

During the key stakeholder meetings, there was an agreement between the participants and the MCSP staff that continued feedback from stakeholders on the program should continue. Areas of follow-up after the meeting include:

- Individual meetings with the MoH, other PVOs with related experiences, and the DSSD for Memorandum of Understanding.
- Write-up of meeting notes from the key stakeholder meetings for participants with a 'Next Step' section describing how the MCSP will keep the communication and integration of feedback incorporated into the MCSP.
- Distribution of the finalized and approved DIP to program partners including key members of the MoH and DSSD.
- Distribution and as needed, meetings with key people related to findings of breastfeeding ethnographic study and additional focus group discussions.

While meetings have occurred with PLAN International in Embu, a more 'concrete' collaboration needs to be set up. This PVO has worked previously in the MCSP target area with CHWs and TBAs. Needed documents on their activities and experiences have been requested, but not yet obtained. Additional concentration by the MCSP is needed and will be allocated in order to obtain the information offered by PLAN International in order to best prepare future activities.

Composition of DIP team:

Team leader: Dr. Carmela Green Abate, (STA Health & HIV/CRS/EARO), Dr. Alfonso Rosales (STA Health CRS/HQ), Kristin Weinbauer (Program Specialist Health CRS/HQ), Kinyanjui Kaniaru (CRS/K Community Health Manager), Yvonne Ferguson (CRS/K HIV/AIDS Manager), Washington Omwomo (M&E Officer CHU CRS/K), Martha Kihara (CHU CRS/K), George Okothi (MCSP Project Manager CRS/K), Dominic Riungu (MCSP Project Coordinator DSSD), Esther Kibutu (Assistant Project Coordinator MCSP DSSD) and Phillip Wambwa (Assistant Project Coordinator, DSSD)

Table 1: Participants at National 1-day Stakeholders meeting held in Nairobi on February 18th, 2003

NAME	JOB TITLE	ORGANIZATION
Dr. Assumpta Murithii	National Officer	World Health Organization
Dr. Sheila Macharia	Health Officer	USAID
Pheres Nkari		Ministry of Health
Silas N. Kamwaria	Health Information Officer	Ministry of Health
Zablon Barake	Clinical officer	Malaria Control Program (MOH)
Murithi Gatumo	Program Officer	NASCOP (MOH)
Joel K. Njeru	PHEO-Eastern Province	Ministry of Health
Pamela Malebe	Chief Nutritionist	Ministry of Health
Dr. Annah Wamae	Head Div. Child Health	Ministry of Health
Pyabo Olusami	Health Program Officer	UNICEF
Winnie Mutsotso	Project Manager	World Vision
Genya Nyale	Program Manager	Plan International
Patrick Mungai	Research and Evaluation	Plan International
Alice M. Mwangi	Lecturer/Researcher	University of Nairobi
Esther Kibutu	Ass. MCSP Coordinator	Diocese of Embu
Cecilia Nyaga	Program Coordinator	Diocese of Embu
Fr. Vincent Ireri	Development Coordinator	Diocese of Embu
Rosemary Njeri	Zonal Coordinator	Diocese of Embu
Dominic Riungu	MCSP Coordinator	Diocese of Embu
Phillip Wambwa	Ass. MCSP Coordinator	Diocese of Embu
Pamela Wando	Data Analyst	Kenya Catholic Secretarial
Sharley Daddy	Country Representative	CRS/Kenya
David Donovan	HABN Director	CRS/Kenya
Kristin Weinbauer	Health Program Specialist	CRS/HQ Baltimore
Dr. Carmela Green Abate	Regional Senior Health Technical Advisor	CRS/EARO
Kinyanjui Kaniaru	Community Health Unit Manager	CRS/Kenya
Yvonne Furgason	HIV/AIDS Unit Manager	CRS/Kenya
Wahington Omwomo	Monitoring and Evaluation Officer	CRS/Kenya
George Okoth	MCSP Manager	CRS/Kenya
Sr. Rose Fernander	In-charge	Kitolongo Dispensary

Table 2: List of participants at District Planning meeting held in Embu on February 20th, 2003.

NAME	JOB TITLE	ORGANIZATION
Rose M. Njeri	Zonal Coordinator	Diocese of Embu
Phillip Wambwa	Ass. MCSP Coordinator	Embu Diocese
Cecilia Nyaga	Program Coordinator	Embu Diocese
Dominic Riungu	MCSP Coordinator	Embu Diocese
Esther Kibutu	Ass. MCSP Coordinator	Embu Diocese
Elizabeth Mbanai Njeru	Extension Worker	Embu Diocese
Joanne Nyambura	Extension Worker	Embu Diocese
Fr. Vincent Ileri	Development Coordinator	Embu Diocese
Pheres G. Nkari		Ministry of Health
Amon N. Nguru	District Public Health Nurse (DPHN)	Ministry of Health
Silas N. Kamwaria	Health Information Officer	Ministry of Health
Dr. Isaac K. Mugoya	District Medical Officer Of Health	Ministry of Health (Mbeere District)
Michael G. Kathuri	District Public Health Officer (DPHO)	Ministry of Health
Dr. Carmela Green Abate	Regional Health Senior Technical Advisor	CRS/EARO
Kristin Weinbauer	Health Program Specialist	CRS/HQ Baltimore
Yvonne Ferguson	HIV/AIDS Unit Manager	CRS/Kenya
Kinyanjui Kaniaru	Community Health Unit Manager	CRS/Kenya
Washington Omwomo	Monitoring and Evaluation Officer	CRS/Kenya
George Okoth	MCSP Manager	CRS/Kenya
Sr. Rose Fernander	In-Charge	Kitolongo Dispensary

D. Revisions from Original Proposal

D.1 Budget

Budget is inserted into the paper copy. The electronic copy will have a separate Excel sheet with the budget. The budget narrative is kept within the document.

Budget Narrative

This budget reflects current costs related to the implementation and management of a health project in Kenya, and accurately reflects the level of program activity. All costs in the budget reflect a 10% cost of living increase per annum. The budget is based on the average exchange rate of 1 US \$ = 78 Shillings. Procurement of all equipment and materials, using USAID funds, will be done as per USAID guidelines during the year as reflected in the budget.

At the end of these budgetary notes, the reader can locate the section on ‘main changes from proposal’.

Direct Field Costs

1. Personnel

Unit cost under this line item refers to monthly salaries.

Staff funded by USAID includes:

CRS staff: the CRS HQ Sr. Health Technical Advisor (10%), CRS MCSP Manager (70%),

Partner staff: DSSD CS Coordinator (100%), 2 DSSD Assistant CS Coordinators (100%), DSSD Finance Officer (50%), 11 Extension Workers (100%) and 2 drivers (100%).

Staff funded by CRS includes:

CRS EARO Sr. Health Technical Advisor (20%), CRS CHU Manager (10%), CRS HIV/AIDS Manager (10%), CRS MCSP Manager (30%), CRS M&E Officer (30%) and CRS Finance Officer (15%). DSSD Development Coordinator (10%).

2. Fringe Benefits

Benefits for Kenyan nationals include:

- Severance payment reserve equal to one salary per month per year of service;
- A social security payment proportional to the salary earned;
- Life and medical insurance adjustment

Benefits are calculated at 40% of yearly salary for CRS staff. Proposed USAID funded benefits total USD 26,345. Proposed CRS funded benefits total USD 23,738

The Diocese of Embu provides employees benefits valued at approximately 20% of yearly salary. Proposed USAID funded benefits for the Diocese staff total USD 81,556 for the Life of Activity.

Benefits for CRS International staff are calculated at 33% of yearly salary. Proposed USAID- funded benefits total USD 10,987 over the Life of the Activity.

3. Office Expenses (CRS & Partner Office)

Stationary, telephone/fax/email, printing/photocopying, postage, office equipments and equipment maintenance and repair expenses are based on average actual costs incurred for CRS and the Partner.

4. Travel

a) Consultants

The project plans to use an international consultant for the final evaluation. The unit cost of the trip is \$ 6730, and includes airfare, per diem, ground transportation, insurance, hotel accommodation and miscellaneous (visa, airport tax etc.). A national consultant will be hired for the midterm review. The unit cost of the trip is \$ 2,315, which includes local transportation and per diem. These costs will be covered entirely by funds from USAID.

b) EARO Sr. Health Regional Technical Advisor (RTA)

All travel and per diem by the EARO Sr. Health RTA is covered by CRS. The EARO Sr. Health RTA is based in Ethiopia and will make two trips a year to the project to provide technical support for the baseline survey, DIP, MTE, final evaluation as well as annual reviews.

c) In-country monitoring

In-country monitoring costs are based on current fares for travel and per-diem, and reflect CRS travel policies. These costs will be covered entirely by funds from USAID.

5. Vehicle expenses

USAID will cover fuel expenses for monitoring trips for CRS and the partner. Fuel costs are based on the Kenya AA rate of Ksh. 7.5 per Km and Ksh 7.2 per Km for maintenance for each vehicle. The distance for each activity was estimated based on estimated number of trips and actual mileage covered. The AA rate for motorcycles is Ksh. 2.4/Km for 17,000 Km per motorcycle. CRS will

cover all vehicle/motorcycle expenses related to registration, insurance, maintenance and repairs.

6. Material purchases

All material purchases related to registers (225) and IEC materials will be covered by USAID. Printing and reproduction (such as nutritional counseling cards, training curricula and modules) will be covered by both CRS and USAID. The UNICEF pneumonia timers (225) and bicycles (10) will be covered by CRS. SP drugs for malaria, ITNs and HIV rapid test kits will be covered by CRS. The number of Rapid Test Kits was reduced as it is expected that NASCOP will supply 80%. SP drugs were calculated as follows: SP dose for children under 4 is ½ tablet x 4 malaria episodes/year x 18,000 children (10,500 in Gachoka in Year 1 and 7,500 in Mwea plus 10,500 in Gachoka for Year 2 and 3). SP is sold in tins of 1,000 @ \$20.98. The rapid test kits were calculated by estimating that 10% of WRA (3,000 in Gachoka) would consent to testing. Two tests are required for each woman (6,000 kits) at \$2.00 a kit. A second VCT site will be established in Mwea (2,000) in Year 3 (4,000 kits).

7. Contractual services/ surveys

Consultancy fees are included for both national and international technical assistance visits in the areas of the midterm review, breast feeding survey (national consultant) and final evaluation (international consultant). CRS will draw on technical expertise within the Kenya and regional CRS offices for support to KPC surveys, HIS design, organizational self-assessment, and operations research. Survey costs include travel and per diem for local enumerators, as well as materials to carry out and analyze the survey.

8. Training

Training costs for staff and communities will be covered by grant funds from USAID. Total training costs for the five-year period include daily costs of accommodations and per diem, venue, stationary and printing materials and transport, or fuel. All training events are community-based and are phased in over the five-year period.

Field Equipment Costs

1. Equipment

Grant funds from USAID will not be used for the purchase of any capital equipment. CRS will cover the cost of 3 computers/printers/software, 2 vehicles and 5 motorcycles for DSSD.

Headquarters Direct Costs**1. Personnel**

Grant funds from USAID will cover 10% of the salary for the Sr. Health Technical Advisor in the technical unit at CRS Headquarters in Baltimore, MD.

2. Fringe Benefits

Benefits are calculated at 33% of the salary of the Sr. Health Technical Advisor in the technical unit at CRS headquarters.

3. Travel

The USAID portion of the budget will cover the headquarters Senior Health Technical Advisor's (Health STA) expenditures to technically support program monitoring activities based on this, the Health STA will make 3 visits to Kenya to provide technical support to the DIP, midterm and final evaluation.

NICRA

NICRA includes 27% of all direct field costs, and therefore excludes capital equipment and headquarters direct costs.

MAJOR CHANGES FROM PROPOSAL**Personnel**

CRS HIV/AIDS Manager (10%) was included while the CHU manager time was reduced from 15% to 10%. CRS CBU Manager was removed.

The DSSD Development Coordinator (10% CRS) and two drivers (100% USAID) were included. The number of Extension Workers (100% USAID) was reduced from 14 to 11.

Travel

More detailed travel costs were factored in, especially for surveys.

Non-capital equipment and material purchases

New inclusion included weighing scales/furniture (CRS) and ITNs (CRS)

Contractual Services/Surveys

More detailed line items and advertisements/recruitment fees added (USAID)

Trainings

DHMT/PHMT IMCI Training was removed and will be supported by IHAP together with the Breastfeeding Survey.

D.2 Program Revisions

There has been no change in project location. The four main project areas for intervention have remained unchanged. However, the level of effort to be made on Nutrition is increased from 25% to 30% and that of HIV decreased from 20% to 15%.

1. Nutrition and Micronutrients (30%)
2. Malaria (30%)
3. Pneumonia (25%)
4. HIV/AIDS (15%)

The tables on the following pages summarize the objective changes. Program revisions are also described in detail under each intervention section in section E.3

1. NUTRITION & MICRONUTRIENTS	
<i>Original Objective & Indicators</i>	
Improved nutritional status of children < 5 years	<ul style="list-style-type: none"> • Reduction of CU5 who are stunted (H/A < -2SD) from X% to Y% • 30% increase above baseline caretakers of children <24 months who initiate breastfeeding within 1 hour after birth • 30% increase above baseline caretakers who report exclusively breastfeeding their children 0-6 months • Proportion of caretakers who can list at least two vitamin A rich foods • Reduction of children <24 months who are less than 80% Weight for age from X% to Y%
<i>Revised Objective & Indicators</i>	
1.1.Improved feeding practices of caretakers with children <24 months	<ul style="list-style-type: none"> • 10% increase of mothers who report exclusively breastfeeding their children 0-6 months • 30% increase of caretakers that introduce complementary food to children 6-24 months • 20% above baseline of children 20-23 months who are still breastfeeding • 5% increase of mothers with children <24 months who practice hand washing with soap or ash before food preparation and before feeding a child. <ul style="list-style-type: none"> ▪ 30% of children given more food than usual after an illness ▪ 15% increase above the baseline of mothers/caretakers with knowledge on correct preparation and administration of ORS at household level.
<i>Original Objective & Indicators</i>	
Improved micronutrient intake for children < 5 years and pregnant women	<ul style="list-style-type: none"> • % CU5 who received Vitamin A capsules increases from X% to Y% • 30% increase from baseline of children eating Vitamin A rich foods • 30% increase above baseline of mothers receiving Vitamin A capsules immediately postpartum • 20% increase above baseline of pregnant women receiving iron supplements
<i>Revised Objective & Indicators</i>	
1.2.Improved micronutrient intake for children <5 years and postpartum women	<ul style="list-style-type: none"> • 30% increase of children 6 to 23 months old receiving Vitamin A capsules in the last 6 months • 30% increase of women within 8 weeks post delivery receiving Vitamin A Supplementation • 20% increase above baseline (about 50%) of children 6-23 months of children eating at least 2 sources of Vitamin A rich foods.
<i>Summary of rational for change</i>	
<ul style="list-style-type: none"> ▪ The indicators have been modified to reflect change to be made under the MCSP in poor feeding practices. ▪ Poor hand washing practices and a high prevalence of diarrhea have been addressed by the additional hand washing indicator; in addition feeding of the child after recovering illness has been emphasized. ▪ Maternal supplementation of iron during pregnancy has been removed. This is because the MCSP does not have a focus on reproductive health and iron supplements are not allowed by the MoH to be distributed at community level 	

MALARIA	
<i>Original Objective & Indicators</i>	
Improved caretaker knowledge and practice on malaria prevention	<ul style="list-style-type: none"> ▪ 30% increase above baseline in caretaker knowledge of at least 2 methods of malaria prevention ▪ 20% increases above baseline of pregnant women who report sleeping under an ITN the previous night ▪ 20% increase above baseline of caretakers who report their CU5 slept under an ITN the previous night. ▪ 20% increase above baseline of pregnant women receiving SP intermittent treatment at community level.
<i>Revised Objective & Indicators</i>	
2.1.Improved caretaker knowledge and practice on malaria prevention	<ul style="list-style-type: none"> ▪ Increase from 2% to 50% caretaker knowledge on use of ITN and at least one other method of malaria prevention ▪ Increase from 17% to 30% of pregnant women sleeping under ITNs the previous night ▪ Increase from 10% to 20% Children <5 years sleeping under ITNs the previous night.
<i>Original Objective & Indicators</i>	
Improved caretaker management of malaria in children < 5 years	<ul style="list-style-type: none"> ▪ 20% increase above baseline of caretakers of CU5 who know at least 2 danger signs for severe malaria to seek care immediately ▪ Increase 30% above baseline caretakers of CU5 with high fever in the last two weeks who sought care from a trained health provider ▪ 40% increase above baseline caretakers of CU5 with high fever in the last two weeks who report receiving appropriate anti-malarial treatment
<i>Revised Objective & Indicators</i>	
2.2.Improved caretaker health seeking behavior on management of malaria in children < 5 years old	<ul style="list-style-type: none"> • Increase from 47% to 70% of caretakers of children < 5 years who recognize at least 2 danger signs for severe malaria to seek care within 48 hours (Fever is a must mention for one of the 2 signs) ▪ Increase from 68% to 80% caretaker of children <5 years with high fever in the last 2 weeks who seek care from a trained health provider. ▪ Increase from 20% to 50% of caretakers of CU5 with high fever receiving appropriate anti-malarials.
<i>Original Objective & Indicators</i>	
Improved facility level management of malaria	<ul style="list-style-type: none"> ▪ 50% increase above baseline of CU5 treated correctly for malaria at the facility. ▪ 20% increase above baseline of pregnant women receiving SP treatment as part of ANC.
<i>Revised Objective & Indicators</i>	
2.3.Improved facility level management of malaria	<ul style="list-style-type: none"> ▪ Increase from 20% to 50% of CU5 with fever receiving recommended anti-malaria treatment
<i>Summary of rational for change</i>	
<ul style="list-style-type: none"> • Shopkeepers & traditional healers are not shown in the KPC baseline to be a major source of health care. Additionally, it is common knowledge that there is a rapid turnover of shopkeepers. Therefore, targeting this group for training has been removed. • Indicator looking at pregnant women receiving anti-malarial treatment as part of ANC has been removed because IMCI focuses on case management of the sick child and the MCSP does not focus on the identification and follow-up of pregnant women; additionally SP cannot be given to pregnant women at community level by TBAs or other community level health workers. 	

PNEUMONIA		CRS MCSP
Original Objective & Indicators		
Increased caretaker knowledge of and treatment of children < 5 years with pneumonia	<ul style="list-style-type: none">20% increase above baseline of caretakers with CU5 who are able to correctly identify at least 2 danger signs of pneumonia that require seeking care immediately.20% increase above baseline of caretakers of CU5 who sought appropriate medical treatment for their child with cough and fast/difficult breathing.20% increase above baseline of caretakers reporting that a full course of appropriate treatment was given.	
Revised Objective & Indicators		
3.1. Increased caretaker knowledge of and treatment of children < 5 years with pneumonia	<ul style="list-style-type: none">20% increase above baseline of caretakers with CU5 who are able to correctly identify at least 2 danger signs of pneumonia that require seeking care within 24 hours(must mention fast/difficult breathing).20% increase above baseline of caretakers of CU5 who sought medical treatment for their child with cough and fast/difficult breathing within 24 hours.	
Original Objective & Indicators		
Improved health workers management of pneumonia in children < 5 years.	<ul style="list-style-type: none">60% of dispensaries will have health care workers managing children with appropriate IMCI protocols.	
Revised Objective & Indicators		
3.2. Improved health workers management of pneumonia in children < 5 years.	<ul style="list-style-type: none">60% of healthcare workers in health facilities to appropriately classify and treat pneumonia in CU5	
Summary of rational for change		
<ul style="list-style-type: none">The indicator referring to caretakers reporting a full course of appropriate treatment for pneumonia has been removed . CHWs are currently not allowed to give treatment for pneumonia and it was felt that this indicator at the facility level was measured under 3.2.		
HIV/AIDS		
Original Objective & Indicators		
Improved knowledge of WRA on prevention of HIV/AIDS and MTCT	<ul style="list-style-type: none">Increase 50% above baseline WRA able to correctly identify 2 reasons why it is beneficial to know your HIV status during pregnancy.	
Revised Objective & Indicators		
4.1. Improved Access of WRA to VCT services .	<ul style="list-style-type: none">Increase from 7.5%¹² to 40% # of WRA who utilize VCT services¹³.# counselors trained in VCT pilot sites	
Original Objective & Indicators		
Increased availability of VCT facilities and PMCT services	<ul style="list-style-type: none">2 VCT and PMCT sites functioning# HIV counselors trained at 2 VCT pilot sitesQuality HIV/AIDS testing procedures in place# clients coming for VCT# pregnant women and babies who received Niverapine for PMCT.	
Revised Objective & Indicators		
4.2. Improved access to PMCT services for HIV+ pregnant women.	<ul style="list-style-type: none"># pregnant women and babies who received Niverapine for PMCT.# health facility staff trained in PMTCT according to standard guidelines and protocols.	
Summary of rational for change		
<ul style="list-style-type: none">Objective 4.1. was changed from improved knowledge to access to care because the KPC results showed a higher level of knowledge than previously anticipated.		

E. DETAILED IMPLEMENTATION PLAN

E.1. Program Monitoring & Evaluation Plans

Description of the Current Information System

All health facilities submit monthly morbidity service reports to the District Health Information Officer. Information on these forms comprises age and disease morbidity coding of all people attending the health facility for various services. This information is disaggregated by sex. There is a separate reporting format to report immunizations, Vitamin A supplementation and antenatal activities. There are additional MoH quarterly summary data sheets and forms for VCT and PTMCT services.

At the community level, there is currently no health information system. The project will review the MOH reporting formats and ensure that the project's Health Information System is linked with that of MoH.

MCSP Monitoring & Evaluation Plan

Design: The fundamental project monitoring system is based on LQAS principles and there are 10 designated supervisory areas (5 in each division). These supervisory areas correspond to the supervisory area used in the baseline KPC. This allows for the project to evaluate chosen indicators more frequently in the project area.

During the initial stages in the development of the health information system, the CRS/Kenya health team will review the different data collection tools used in the locality and assess their relevance to project objectives and the national health information system. The project will look for a tool with two characteristics, simplicity and sustainability. After considering various models, the project will develop “community register” tools to collect data on case management, utilization of ITNs, referral tracking, and growth monitoring. These tools will be used by the Community Health Workers (CHWs) to collect data at the community level.

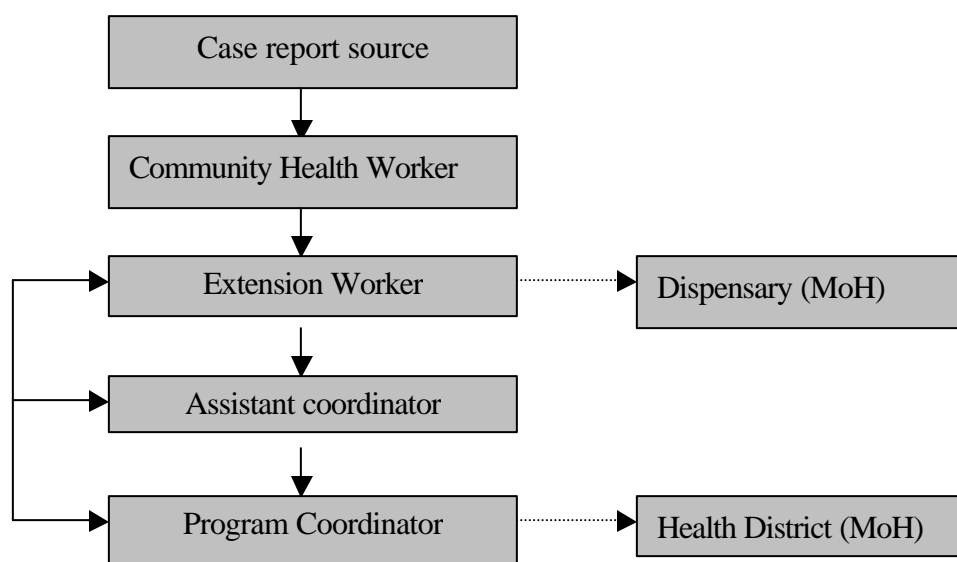
Information system flow: The population targeted by the community-based health information system will be children under five and pregnant women. The collection of information will be done on a routine basis by the CHWs who will identify and maintain a register of all children in their locality under 5 years and pregnant women. This collection of data will be done during the CHW activities. For example,

- Growth monitoring and nutritional counseling will focus on children under 24 months.
- The promotion of Vitamin A supplementation will focus on postpartum women and children < 5 years.
- Management of malaria, and pneumonia will capture information on all children <5 years.

This information will be collected by the CHWs from their client base on a community based health register, which will be designed/modified from existing formats. Below in Figure 1 is a graphical presentation of the flow of information from the CHWs up to the program coordinator and district MoH. The CHW submits the collected data to the

extension worker. The extension worker consolidates this information into a previously designed format and submits it to the assistant coordinator. The assistant coordinator consolidates information of all his/her supervised geographical areas and, turns it over to the project coordinator. The Extension Worker will discuss the progress with the local dispensary staff while the Project Coordinator discusses the progress with the District HIS officer. This monitoring system will complement the focus of the MCSP for supportive supervision to increase community health worker motivation and promote quality services.

Figure 1. Community health information system flow, Mbeere, Kenya.



HIS Training: The training on the HIS for this project will be done in two phases. During the first phase, all project personnel (Coordinators and Extension Workers) will receive a 5-day training. During the second phase, a 3-day training is planned for the CHWs. The training of CHWs on HIS will be part of sessions in the overall training curriculum of CHWs.

Supervision: The supervision system will be implemented at various levels. In the first level of supervision, the extension worker supervises the local level data collection. This supervision is done on a monthly basis and has three main objectives:

- a) To review the information system;
- b) To analyze child health status and utilization of ITNs in the locality based upon the information collected; and,
- c) To provide continued education to the CHW including discussions on clinical assessment results on one to one and/or group meetings.

In the second level of supervision, the extension worker will consolidate the community level reports from his/her supervisory area. This report is submitted to the Assistant Coordinator.

In the third level of supervision, the Assistant Coordinator consolidates reports from the 5 supervisory areas under his/her remit and attaches an additional narrative report, which is submitted to the Project Coordinator. The Project Coordinator, in conjunction with the MCSP Project Manager will analyze this information during regularly scheduled project meetings with the 2 Assistant Coordinators and Extension Workers. Project implementation is also discussed with a monthly plan of action agreed upon. The analysis includes information on child health status, case management supervisory findings and utilization of ITNs in the area of project coverage. These meetings will focus on results obtained in comparison to targets set and identify and solve implementation problems.

Analysis of data

Community level: The project will develop with CHWs performance targets, which will be assessed on a monthly basis by DSSD project team; subsequently, an activity plan will be developed and implemented. The development of performance targets will involve the sharing of project activities with CHWs and community leaders. Based on the project wide performance targets, CHWs area specific performance targets will be developed with all stakeholders (community leaders and all local health committees) involved. This strategy will enhance community ownership of its health program.

MoH: Monthly project reports will be shared with health dispensaries and district HIS officer. and make adjustments as necessary; a more detailed action plan will be developed and implemented.

Sharing Results: Project stakeholders (CRS, DSSD, MoH, other PVOs in the area) will meet on a semi-annual basis to discuss current achievements and limitations of the project. Based upon discussions a plan of action will be developed.

It is also envisaged that there will be a sharing of information among other PVOs in Kenya currently managing a USAID Child Survival Grant. Meetings will be arranged on a semi-annual/annual basis to create a forum for experience sharing and exchange of specific operational research or other survey findings.

In addition, at the Regional level, the Senior Regional Health Technical Advisor will arrange opportunities for sharing of information between CRS/EARO Health programs. This will be carried out at least every 2 years. At the HQ level, the experience gained under the MCSP will be shared with other CRS country programs where there are on-going CS grants. There will also be regular updates placed on the CRS website. Opportunities for a broader sharing of information at national and international technical meetings will also be undertaken as appropriate.

Advocacy: During “child health days”, held once a year, community health data and project accomplishments will be presented to community leaders and community members. Health needs will be identified to mobilize the community to address them.

DSSD/CRS Kenya: The project will develop performance targets, which will be assessed on a quarterly basis; subsequently, the team will review the next quarterly plan outline and make adjustments as necessary; a more detailed action plan will be developed and implemented.

Evaluation Reports

Quarterly: On a quarterly basis, the project coordinator will develop and submit a report to the MCSP project manager (CRS). The report will be reviewed and discussed by CRS’ child survival project manager and the M & E officer. Afterwards, a technical assistance plan will be developed and implemented.

End Year Assessment: The MCSP Project Manager and CRS M&E Officer will work with the DSSD MCSP team to develop end year assessment methodology and tools for reviewing the project’s annual progress. This will be based on the supervisory areas. The DSSD Project Coordinator will take lead in carrying out this assessment and results will be used to identify areas for technical support at levels of project implementation. The DSSD Project Coordinator will develop a report, which will be shared with CRS MCSP Project Manager.

Annual Report: CRS Kenya (Mbeere Child Survival Project Manager and Community Health Manager) will develop an annual report, following USAID-Global Bureau guidelines, which will be submitted on September 30th to CRS-PQSD (Baltimore). This report will be reviewed by the health unit at PQSD and submitted to USAID Washington on October 30th of every year.

Midterm evaluation (MTE): During the third year of project implementation, a midterm evaluation will be undertaken by an external consultant. This MTE will follow USAID-Global Bureau guidelines, and a final report will be submitted in October FY 2005. The evaluation will be implemented following a participatory approach, with the involvement of all stakeholders. The CRS Senior Regional Health Advisor and PQSD Senior Health Advisor will collaborate in the implementation of the evaluation. A final report will be submitted by the external consultant to the PQSD health advisor, who will review and approve the evaluation, and subsequently will be submitted to USAID Washington.

Final evaluation: At the end of the fifth implementation year (FY07), a final evaluation will be carried out by an external evaluator. This evaluation will follow USAID-Global Bureau guidelines for final evaluations, and a final report will be submitted in October FY07. As in the MTE, a participatory approach will be used to gain inputs from all stakeholders. Part of the evaluation process will include a KPC survey, which will collect data to compare with the baseline survey. The EARO Health and HIV/AIDS STA and the PQSD Health STA will take part in this evaluation. A draft report will be

presented to the CRS/Kenya Country Representative for comment. The external consultant will then submit the final report to the PQSD health advisor, who will approve the evaluation, and subsequently submits it to USAID/Washington.

Monitoring Tools: Data for monitoring purposes will be collected utilizing “community registers” and “supervisory checklists”. These tools will be developed and/or adapted by CRS’ M&E officer, the MCS project manager, and the DSSD health team. These tools will be field tested prior to field implementation by the DSSD health team. LQAS sampling methodology will be used to collect annual data on selected project indicators from supervision areas. The data will be analyzed and findings included in the annual report.

Population Denominator: A community census will be implemented at the beginning of project implementation. Subsequently, a maternal and child health register will be developed and maintained routinely by the CHWs whom will routinely include the names of the newborns in the child health register.

Health Worker Performance Assessment

MoH level: The Ministry of Health has developed a supervisory checklist, based on IMCI principles and adapted from the WHO supervisory guidelines¹⁴ that will be used to assess health worker performance at the health facility level. This will also include a review of patient health cards, observation of health worker performance and exit interviews with caretakers.

DSSD: The project will use the MoH supervisory checklist for monitoring activities of CHWs in case-management. The community health workers will be taken to a nearby health facility where extension workers/MoH will use the supervisory checklist to assess CHW case management skills. This monitoring activity will be done one month after the completion of CHW training and thereafter on a quarterly basis. The results from this assessment will be used to develop refresher trainings as needed. Extension Worker skills will also be assessed every six months, using the same supervisory checklists. This will be done by the MoH’s IMCI Coordinator and the DSSD Project Coordinator. This exercise will help in checking their quality of skills and maintaining supervision for CHWs.

Health Facility Assessment: The MoH, after IMCI training, will conduct a health facility assessment during the follow-up visits of health facilities. The assessment is already planned as a component of the National IMCI health staff-training program. The process of assessment is planned to be participatory between the health facility staff and the trained IMCI supervisors. The aim of the participatory assessment is to assess the level acquired skills and their utilization and to identify the gaps and barriers to effective implementation of IMCI at health facility level. The identified gaps are reviewed with all the health facility staff and a plan drawn up in order to address them. (See Annex 12 for the Checklist of Facility Supports and Summary)

Also exit interviews will be conducted on a semi-annual basis to assess knowledge of caretakers on malaria and pneumonia danger signs indicating the need to seek health care, and the quality of services offered by health facilities. As part of the quality assurance monitoring for the two VCT pilot sites, exit interviews, carried out by a community volunteer assigned by the Health Facility Management Team, will assess use and quality of services. Results of these assessments will be discussed with the respective health facility staff management team; MoH officers and project personnel will then determine future actions.

Tools:

- ❑ The Ministry of Health is currently developing C-IMCI guidelines. This tool will be used to train CHWs to implement G-IMCI activities at the community level.
- ❑ Community Health Workers training curriculum
- ❑ Supervisory checklists for MoH and community level.
- ❑ PSI training curriculum for malaria prevention
- ❑ M&E matrix for performance benchmarks.
- ❑ Community registers
- ❑ LQAS manual

Strengthening M&E skills of project personnel: The DSSD Team will be trained on HIS, data analysis and use of data for decision-making.. The revised M&E matrix is shown below:

1. NUTRITION AND MICRONUTRIENTS (30%)				
Objectives	Indicators	Data Source	Major Planned Activities	Critical Assumptions
1.1.Improved feeding practices of caretakers with children <24 months	<ul style="list-style-type: none"> • 10% increase of mothers who report exclusively breastfeeding their children 0-6 months • 30% increase of caretakers that introduce complementary food to children 6-24 months • 20% above baseline of children 20-23 months who are still breastfeeding • 5% increase of mothers with children <24 months who practice hand washing with soap or ash before food preparation and before feeding a child. • 30 % of children given more food than usual after an illness 	<p>KPC baseline, midterm & EOP</p> <p>KPC baseline, midterm & EOP KPC baseline, midterm & EOP KPC baseline, midterm & EOP</p> <p>KPC baseline, midterm & EOP</p>	<ul style="list-style-type: none"> ➤ Identify mothers with children < 6 months; qualitative study on constraints of EBF. ➤ Community education on breastfeeding and nutrition ➤ Nutritional counseling for caretakers of malnourished children <24 months ➤ Breastfeeding and appropriate feeding promotion through mother to mother support groups ➤ Revision of nutritional counseling cards to include hygiene messages ➤ Monthly growth monitoring of children under 24 months by CHWs ➤ Supportive supervision of CHWs 	Mothers are motivated to adopt proposed feeding practices
1.2.Improved micronutrient intake for children <5 years and postpartum women	<ul style="list-style-type: none"> ▪ 30% increase of children 6 to 23 months old receiving Vitamin A capsules in the last 6 months ▪ 30% increase of women within 8 weeks post delivery receiving Vitamin A Supplementation ▪ 20% increase above baseline (about 50%) of children 6-23 months of children eating at least 2 sources of Vitamin A rich foods. 	<p>KPC baseline, midterm & EOP</p> <p>Child health cards Maternal ANC records</p>	<ul style="list-style-type: none"> ➤ Educate communities on child nutrition and micronutrients ➤ Review nutritional counseling cards to ensure adequate and appropriate messages on Vitamin A ➤ Train CHWs and dispensary staff on vitamin A ➤ TBAs and CHWs identify postpartum women ➤ Link with IHAP agricultural promotion of Vitamin A rich foods ➤ Supportive supervision of CHWs 	<p>.</p> <p>1. Vitamin A capsules are available.</p>

2.MALARIA (30%)				
Objectives	Indicators	Data Source	Major Planned Activities	Critical Assumptions
2.1.Improved caretaker knowledge and practice on malaria prevention	<ul style="list-style-type: none"> ▪ Increase 2% to 50% caretaker knowledge on use on ITN and at least one other method of malaria prevention ▪ Increase from 17% to 30% of pregnant women sleeping under ITNs the previous night ▪ Increase from 10% to 20% Children <5 years sleeping under ITNs the previous night. 	<p>KPC baseline and EOP</p> <p>Community-based monitoring rosters</p>	<ul style="list-style-type: none"> ➤ Development of BCC strategies for malaria prevention, treatment and control ➤ Education of CORPS and community members in malaria prevention, treatment and control strategies ➤ Coordination with PSI to establish ongoing community-based ITN distribution and sales ➤ CHWs involved in ITN sales and SP distribution 	<ol style="list-style-type: none"> 1. Households have resources and are willing to purchase ITNs. 2. ITNs are affordable and available 3. Community is willing to adopt new practices.
2.2.Improve caretaker health seeking behavior on management of malaria in children < 5 years old	<ul style="list-style-type: none"> • Increase from 47% to 70% of caretakers of children < 5 years who recognize at least 2 danger signs for severe malaria to seek care within 48 hours (Fever is a must mention for one of the 2 signs) ▪ Increase from 68% to 80% caretaker of children <5 years with high fever in the last 2 weeks who seek care from a trained provider. ▪ Increase from 20% to 50% of caretakers of CU5 with high fever receiving appropriate anti-malarials. 	<p>KPC baseline and final</p> <p>CHW reports</p>	<ul style="list-style-type: none"> ➤ Community education on recognition and prevention of malaria ➤ Development of communication strategies for severe malaria recognition; ➤ Training of CHWs & health workers in counseling, treatment and prevention of malaria control using IMCI approach ➤ Develop/strengthen referral system from CHWs to facility levels. 	<ol style="list-style-type: none"> 1. Caretakers have the authority to seek care for their children. 2. There is access to trained health provider. 3. Community is willing to adopt new practices 4. Malaria drug resistance patterns do not change during the LOP.
2.3.Improved facility level management of malaria	<ul style="list-style-type: none"> ▪ Increase from 20% to 50% of CU5 with fever receiving recommended anti-malaria treatment 	<p>Dispensary records</p> <p>Facility quality care checklists</p>	<ul style="list-style-type: none"> ➤ Health facility IMCI training ➤ Strengthen referral system ➤ Train Dispensary Health Committees (DHCs) on general management of institution (linking them with) with special drug kits for children; financial; procurement; logistics 	<ol style="list-style-type: none"> 1. Drugs are available and affordable at health facilities 2. Malaria drug resistance patterns do not change during LOP

3. PNEUMONIA (25%)				
Objectives	Indicators	Data Source	Major Planned Activities	Critical Assumptions
3.1. Increased caretaker knowledge of and treatment of children < 5 years with pneumonia	<ul style="list-style-type: none"> ▪ 20% increase above baseline of caretakers with CU5 who are able to correctly identify at least 2 danger signs of pneumonia that require seeking care within 24 hours (must mention fast/difficult breathing). ▪ 20% increase above baseline of caretakers of CU5 who sought medical treatment for their child with cough and fast/difficult breathing within 24 hours. 	<p>KPC baseline and EOP</p> <p>Health facility records</p> <p>CHW records</p>	<ul style="list-style-type: none"> ➤ Development of BCC strategies for improved pneumonia recognition, care seeking and treatment. ➤ CHW training in C-IMCI ➤ Supervision & support of CHWs ➤ IMCI training at facility level ➤ Educate community members on recognition, treatment and appropriate care for pneumonia 	<ol style="list-style-type: none"> 1. Drugs are available at health facilities, according to IMCI protocols. 2. Caretakers have authority to seek treatment at health facilities. 3. A demand for services will be created from the caretakers at the facility and community
3.2. Improved health workers management of pneumonia in children < 5 years.	<ul style="list-style-type: none"> ▪ 60% of healthcare workers in health facilities who appropriately classify and treat pneumonia in CU5 	<p>HFA baseline & EOP</p> <p>Facility Quality Care checklists</p>	<ul style="list-style-type: none"> ➤ IMCI training ➤ Joint supportive supervisory visits by DHMT and DSSD to dispensary staff ➤ Management training of DHC members (to include financial management & accountability, governance, leadership skills) ➤ Strengthening of referral systems 	<ol style="list-style-type: none"> 1. IMCI training takes place as planned 2. Drugs are available according to IMCI protocols 3. Caretakers bring their children to health facilities

4. HIV/AIDS (15%)				
4.1. Improved Access of WRA to VCT services .	<ul style="list-style-type: none"> ▪ Increase from 7.5%¹⁵ to 40% of WRA who utilize VCT services¹⁶. ▪ # counselors trained in VCT pilot sites 	KPC baseline and final Laboratory quality checklists Facility HW quality of care assessment	<ul style="list-style-type: none"> ➤ Training in HIV counseling and laboratory testing procedures for selected dispensary workers ➤ Community education on VCT and PMCT ➤ Mother-to-mother support groups 	1. Increasing knowledge will result in more women accessing VCT/PMCT services.
4.2. Improved access to PMCT services for HIV+ pregnant women.	<ul style="list-style-type: none"> ▪ # pregnant women and babies who received Niverapine for PMCT. ▪ # health facility staff trained in PMTCT according to standard guidelines and protocols. 	Annual review of facilities Facility HW quality of care checklists	<ul style="list-style-type: none"> ➤ Development of BCC strategies for PMCT ➤ Training of selected dispensary workers in PMCT strategies, breastfeeding counseling ➤ Training of dispensary health workers in VCT sites in PMTC strategies, breastfeeding counseling ➤ Development of patient education materials in PMCT ➤ Ensuring supplies VCT; Niverapine are available at sites 	1. Test kits available for VCT 1. Niverapine available for PMCT.

E.2. Summary of Baseline and Other Assessments

Summary of KPC Findings

This Knowledge, Practice and Coverage Survey was carried out in collaboration with the Diocese of Embu and the Mbeere Ministry of Health. The survey questionnaire was based on the standardized KPC 2000+. The objectives of the survey were:

- To establish baseline information on critical child health indicators in Mbeere District;
- To obtain information of maternal/caretaker knowledge and practices with regards to immunization, child feeding, growth monitoring, maternal and newborn care, diarrhea, acute respiratory tract infections, malaria, HIV/AIDS and health care seeking behaviors; and,
- To use the survey information to inform and improve the design of the MCSP and determine values for project indicators.

Parallel sampling technique within the Lot Quality Assurance Sampling methodology (LQAS) was used. The use of the LQAS methodology will allow the values obtained for each supervisory area also to form the basis of the MCSP monitoring and supervision system.

The survey comprised a total sample of 380 children < 24 months. Mean maternal age was 27 years, with an illiteracy rate of 18%. Most mothers were housewives, which of course, also means that they work on their land. Thirty-two percent had other income generating activities that took them outside of the home.

The survey identified a number of critical child health issues and also serves to establish baseline levels for the major interventions planned under the MCSP. A number of poor feeding practices were identified. Although the majority of mothers fed their babies soon after delivery and did not discard the colostrum, there is no exclusive breast-feeding in children less than 6 months. This is an important and a worrisome finding. Children under 2 years were fed a diverse diet. However, solid foods were introduced very early and were not given frequently enough. There was also a lack of understanding among mothers of the importance of growth monitoring with most children not being weighed after about 4 months. Thus, there are a number of poor practices, which contribute towards a 30% prevalence of stunting in children 12-23 months. These will all be addressed in the MCSP through community level activities, which will increase caretaker knowledge, encourage mother-to-mother support groups and growth monitoring.

Although 62% of children were fully immunized, this falls short of the Kenyan target of 80%. Similarly Vitamin A supplementation was low. There appears to be poor recording on the growth monitoring cards when these are compared with maternal recall. This will be further addressed as part of the facility IMCI training for health workers.

Knowledge of malaria prevention was fairly high but only one quarter of households had a bed net and only a few mothers knew that this needed to be dipped every six months in insecticide to maximize effectiveness. As the MCSP will strengthen community level primary health services, community health workers will be important promotion agents for socially marketed ITNs. In

addition, mothers will be educated on the signs of severe malaria and prompt healthcare seeking behavior. Community health workers will be trained to provide sulphadoxine/pyremethamine (SP) treatment for simple malaria.

The survey also elicited information on maternal health, although this will not be a focus of intervention at this time. Most mothers attended their local health facility for antenatal care but the majority delivered at home. Traditional Birth Attendants were the principal attendants at home deliveries, although half of them were not trained. Most mothers were unaware of the danger signs during pregnancy and post-partum. They were also unaware of signs and symptoms of illness in their newborn child. As part of increasing mother's awareness of childhood illness, community health workers will be trained to improve mother's knowledge of neonatal symptoms of illness as well as promoting exclusive breast feeding.

Awareness of HIV/AIDS is high, although knowledge of different ways of transmission remains more limited. About three quarters of mothers were also aware that the HIV virus can be transmitted to their baby during pregnancy, labor or through breast-feeding. It is also of note that the majority of mothers indicated that they might be willing to go for HIV testing. The MCSP will support two pilot PMTCT centers, one in each division.

The Mbeere Child Survival Project proposes to use the IMCI strategy that targets the improvement of partnerships between health facility services and communities to address the issues identified in this KPC survey. These include increasing appropriate, accessible care and information to communities through community-based providers and the promotion of key family practices critical for child health and nutrition. The MCSP will effectively address the identified gaps in mothers' knowledge and practices, thereby contributing to the MoH-Mbeere District efforts in addressing some of the causes of childhood mortality and morbidity.

Organizational Baseline Assessment for Local Partner

In February 2003, CRS/Kenya Capacity Building Office carried out a Training Needs Assessment that looked at the training needs as well as job descriptions, organizational chart, and policies and procedures. See Annex 4 for the local partner training needs assessment summary.

MoH policies/strategies

Throughout the preparation of the Mbeere Child Survival Project, the Kenyan MoH at all levels have been involved in the decision process of planned interventions and activities. Sustainability of health activities are considered contingent on working with the MoH either to carry on the direction and growth of the MoH or work toward policy changes if differences of opinions should arise. An example of influencing policy is the integration of community-based IMCI into the MoH guidelines. A committee from the GoK is currently working on a standardized C-IMCI for Kenya. They have been given CRS guidelines on C-IMCI as a tool and are expatiating the process of the finalization of the GoK C-IMCI for utilization in the MCSP.

This type of close collaboration with the MoH has kept the MCSP within the boundaries of MoH policies for all of its interventions and activities. If strategies or policies were found to not support the MoH, these activities were changed and noted at the beginning of the document

under the section on proposal changes and again under the appropriate intervention area in the document.

In Annex 9, the reader can find the MoH policies and/or strategies on all of the MCSP interventions at facility and community levels including malaria control, pneumonia case management, nutrition, Vitamin A supplementation, VCT, and PMTCT.

E.3. Project Description by Objective, Intervention and Activities

E. 3.1 The Community Health Worker

Supervision of CHW

Supervision and training of Community Health Workers (CHWs) cuts across all of the interventions in the MCSP. Therefore, a general description of the supervision of the CHWs will be described prior to the project description by objective, intervention, and activities. For an overall picture of the organizational structure of the MCSP refer to Annex 6.

Quality Assurance

The Project Manager at CRS will support the local partner, DSSD who will be implementing the project. The DSSD Project Coordinator will supervise two Assistant Project Coordinators whom will each be responsible for one of the two divisions covered by the project, Mwea or Gachoka. Each of these divisions are divided into 5 supervisory areas. Each Assistant Project Coordinator will supervise between five and six extension workers depending on which division of the project they supervise. Each extension worker will supervise approximately 20 Community Health Workers (CHWs) organized by geographic proximity in each supervisory area. Each CHW will be responsible for approximately 20 households with caretakers with children under 5 years old. Below is a chart describing the different roles and expectations of the CHW.

Table 3: Roles of the Community Health Worker

Roles	Main Activities
Growth Monitoring (Monthly)	Weighing, Nutritional Counseling
	Check growth monitoring cards for Vitamin A in last 6 months
	Referral to nearest health facility for malnutrition & those without Vitamin A
	Support of mother-to-mother groups
	Education Topics (Different each month, i.e. EBF, Importance of Vitamin A)
Case Management of Sick Children	Assess, classify, and treat malaria including procurement of SP
	Refer cases of severe malaria
	Assess and refer for danger signs of pneumonia
Home visits for follow-up	After referral for Malaria, Nutrition, Pneumonia
	After referral for VA for children and post-partum women
	After referral for VCT/PMTCT
ITN Promotion & Distribution	ITN Procurement, Marketing and Distribution
	Education on the importance of ITNs for pregnant women and CU5
	Reminder / Information on ITN redipping
Community Health Day	Mobilization of Community for attendance
	Reporting to community of the “Status” of Village Health (i.e. growth monitoring and other preventative health measures taken by the community members)

After the initial community sensitization, which will be carried out by the extension workers together with the DSSD management team, the community will elect the CHWs according to pre-agreed criteria. The extension worker will be the focal point for the various training sessions for CHWs and for subsequent regular supportive supervision. The basic training will be given in 3 phases addressing issues of roles and responsibilities of CHWs, malaria prevention and marketing of ITNs, growth monitoring and nutritional counseling and finally assessment, management and follow up of the sick child according to the principles in G-IMCI. At the first growth monitoring session, each extension worker will be present to observe the performance of the CHW using an observation checklist that was developed by CRS/Kenya and offer any technical advice. This will continue each month until the extension worker feels the CHW is able to carry out the GM without their direct supervision. At this time, the extension worker will attend the GM sessions of the CHW every other month. ITN procurement will be addressed with the CHWs at this time.

Each extension worker will assign the CHWs into groups depending on the supervisory area, which is based upon their geographic location. Some extension workers may have more than one group depending on the feasibility of getting all of the CHWs together in one place. One meeting per month with the group will be conducted. At these monthly meetings, the extension worker will receive the CHW activity reports, discuss achievements and challenges faced, review any procurement requirements (SP and ITNs etc). Additionally, the extension worker will make a schedule with the CHWs to ensure that the timing of the GM sessions between the CHWs does not overlap so that the extension worker is physically able to attend as required.

The extension worker will have a quarterly one-on-one meeting with each CHW at which time activities and achievements will be reviewed and an action plan developed by the CHW and extension worker indicating what the CHW believes is within their means to accomplish by the end of the quarter.

After the G-IMCI training of the CHWs, there will be a follow-up evaluation of the CHWs skills at the health facility. An extension worker will bring the group of CHWs they are responsible for and be asked to assess children with problems related to malaria, pneumonia, and nutrition. Assessment for additional training of the CHWs will be done at this time. While the CHW is in the village, they will use community health registers and algorithms to assist them in malaria, pneumonia, and nutrition case management. These sessions will be supervised by the Extension Workers. The Extension Workers will use checklists adapted from the MoH and other NGOs working with CS projects in Kenya. These checklists will be analyzed by the extension workers and Assistant Project Coordinators. The results of the CHWs checklist will be used in improving the performance of their case management.

This type of intensive supervision is made possible by phasing in the training of the CHWs in the supervision areas over 2 years. MCSP has 10 supervision areas. In the first year, CHWs from 4 supervisory areas (2 in Mwea and 2 in Gachoka, respectively) will be undertaken.. As CHWs become competent in growth monitoring and case management, less supervisory emphasis will be put on some of the more experienced CHWs and more invested into newly trained CHWs. In year two, the last six supervision areas in Mwea and Gachoka will be covered. The lessons

learned in the first year of implementation will inform the implementation of the remaining six supervision areas.

CHW Sustainability

One of the main challenges foreseen in the MCSP is CHW sustainability. PLAN International has worked in some of the villages in the project area. From their experiences, they have alerted the MCSP team that their CHW attrition rate was approximately 50%. Additionally, now that the programs no longer exist, CHWs that remained for the life of the project have also become inactive. During the development of this DIP, the MCSP stakeholders worked together, using a motivational model for CHW sustainability¹⁷, to identify activities that support the different areas that motivate the CHW. See Table 4 for the breakdown of different motivational factors that will be used throughout the project in order to improve CHW sustainability. While the short-term goal is aimed at maintaining the trained CHWs throughout the lifetime of the MCSP, strategies were also discussed to improve the chance of sustainability after the project is phased out. In addition to the motivational factors identified below, the MCSP acknowledges that CHWs are *volunteer*. Thus it is only realistic to expect CHWs to contribute a limited number of hours. The project has estimated that the maximum number of households that can be adequately covered by any CHW should not exceed 20 if quality service is to be provided on a sustainable basis. Thus, the original number of CHWs has been increased from 200 to 225.

Table 4: Activities to Motivate CHWs / Decrease Attrition Rates	
Motive	Activity
Sense of Achievement	Increased knowledge from training
	Setting of goals / action plan with Extension Worker; reviewed and revised quarterly
	Profits from the selling of SP and ITNs
Affiliation	Formation of CHW group(s)
	Linkage with other programs (i.e. IHAP ¹⁸) 1. Community meetings – raised awareness of other projects that could benefit the MCSP through integration of ideas 2. The same people from these other programs are already professional in the communities' eyes and this helps form cohesiveness in the MCSP CHW groups.
	Link of CHWs with mission health facilities during SP procurement
Extension (Sense of Purpose)	Create demand of services by CHW during community mobilization
	Awards / Competitions – annually 1. Quarterly Performance Appraisals based on monthly extension worker reports and verbal communication from monthly meetings between Ext. Worker and CHWs. 2. Participatory appraisals by CHWs (community decide on criteria) given a gift of appreciation at the annual community child health meeting 3. Receive certificate and badge after training with IEC material 4. Annually, Give promotional materials such as a t-shirt or hat for those remaining in the project as a CHWs
Influence (Status within the community)	Distribution of SP drugs and ITNs
	Training on malaria case management
	Disseminate information on CHW successes at community meetings (i.e. Positive-deviance mothers testifying outcomes of healthy child)
Dependency (Feeling of support)	Supervision by extension workers 1. Quarterly meetings going over action plan and setting new goals 2. Schedule plan with the Extension worker who will share plans with the CHW
	CHWs will have linkages to health facilities and subsequent improved relationships
Control (part of decision processes)	Extension workers giving feedback to CHWs
	Use of HIS (data collected) to make decisions
	Joint Quarterly Meetings (CHWs with extension workers and assistant project coordinators)

E.3.2 Nutrition and Micronutrients (30% LOE)

Baseline data informing adjustments in objectives and strategies

Accurate district nutritional data was difficult to obtain during the original preparation of the proposal. Available figures ¹⁹ showed an underweight prevalence for children under 5 of 26%, and a 36% stunting rate. The KPC baseline survey report of January 2003 carried out in the areas to be covered by the project (Gachoka and Mwea Divisions), showed an overall prevalence of moderate and severe malnutrition in children <24 months of 15.4% with 3.9% respectively. As might be expected, this was higher in children between 12 –23 months with 25% being moderately malnourished and 5.8% of these being <70% W/A. Overall stunting in the KPC for children < 24 months was 19.2%; 30% of children 12-23 months were stunted.

The KPC survey highlighted a number of poor feeding practices. Although 65% of mothers were found to put their infants on breast immediately and/or within the first hour after delivery and 98% reported having given their infants colostrum during the first three days after delivery, there was no exclusive breastfeeding in children at six months. In general, with national prevalence at only 17%, exclusive breast feeding in Kenya is certainly a problem. However the surprising result of 0% exclusive breast-feeding led the team to reanalyze the relevant KPC data for discrepancies as well as exploring this issue further in FGDs. Exclusive breastfeeding, however, still remained at 0%. Mothers believe that when a baby cries, it is because her breast milk is not sufficient; water was most frequently given very early on. It is not uncommon for mothers to initiate the early introduction of porridge to an infant at only a few weeks of age. Although mothers acknowledge the importance of exclusive breastfeeding up to 6 months, this is rarely practiced. On a more positive note, the KPC 24-hour recall dietary recall data, showed a diverse infant diet. (See Graph 1)

The consumption of vitamin A rich foods was assessed by a 24-hour recall period, and it was found that 65% among children less than two years of age had eaten leafy green vegetables. The most common vitamin A rich foods in the communities were: mangoes, papaya, green leafy vegetables, and eggs. 28% of children above 6 months of age had consumed two types (leafy vegetables and papaya) of Vitamin A rich foods in the previous 24 hours.

Regarding feeding frequency patterns, the KPC study assessed the frequency of the semi-solid (mashed or pureed) food among the age cohorts of 6 months to 12 months and that of 13 months to 23 months. In both age cohorts, the feeding frequency practice among children in a day fell far below the recommended standard. See Table 5 on the following page.

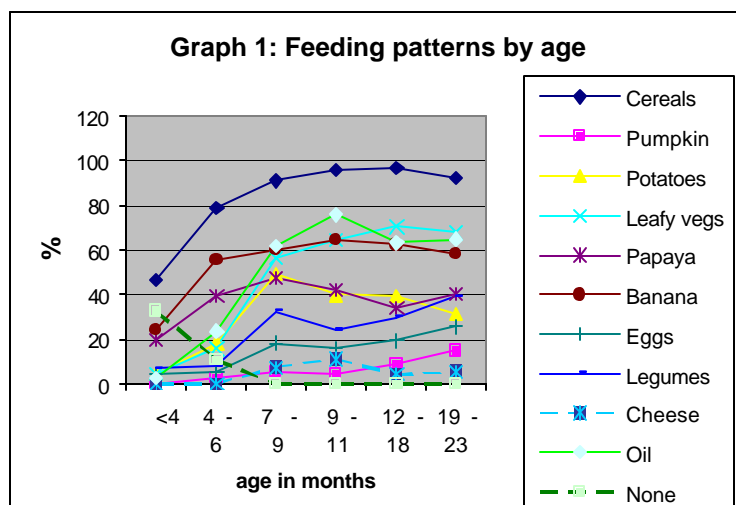
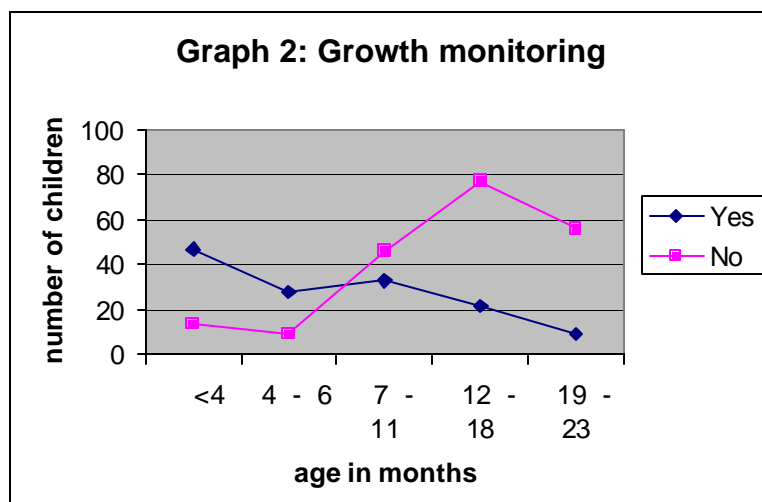


Table 5: Feeding frequency in children under two years of age, Gachoka and Mwea divisions, Mbeere District, Kenya; January 2003.

FEEDING FREQUENCY		
AGE	4 Times	5 Times
6-12 months	10%	2%
13-24 months	20%	2%

In conclusion, there are a number of poor nutritional practices that emerged from the recent KPC, which will be addressed, in the nutritional interventions within the MCSP. These include a very low level of exclusive breast-feeding, the early introduction of weaning foods and insufficient feeding frequency. These practices are seen as serious problems in all the communities surveyed during the CRS/DSSD needs assessment.

In relation to availability and utilization of growth monitoring services from birth to age two years in these two divisions, the study found that 55% of the surveyed children were weighed at birth, and 89% had growth-monitoring cards. While growth monitoring card retention was very high in the area, the consistent growth monitoring of children aged between 2 and 11 months in the last two months prior to the survey was found to be 57%; and for those aged 12 to 24 months of age the proportion of children weighed in the last two months was 16%. It seems that in this area of Kenya, growth monitoring is strongly linked to immunization activities. Thus, once a child has finished immunization, most parents do not continue taking their children for growth monitoring activities.



Specific changes within Nutrition and Micronutrient Objectives

Essential Elements

The project will address 3 key areas:

- Breastfeeding promotion and appropriate feeding practices, including feeding of the sick child;
- Nutritional counseling for malnourished children;
- Micronutrient promotion, with a focus on vitamin A for children and post-partum women.

The nutritional intervention will have two main objectives:

Objective 1: Improve feeding practices of caretakers with children less than 24 months of age.

Objective 2: Improve micronutrient intake for children under 5 years and post-partum women.

Originally the application proposed as objective 1: *‘to improve nutritional status of children less than 5 years of age’*. During the development of the DIP, participating stakeholders did not consider the nutritional approach of the project to be driven at improving household availability of food, but instead the project was targeted to improve primary feeding behaviors. Therefore, Objective 1 was modified to address the improvement of feeding practices.

The primary feeding behaviors to be included in the nutritional intervention are:

- Promotion of exclusive breastfeeding for the first 6 months after delivery;
- The introduction of appropriate complementary feeding from about 6 months of age;;
- Continued breastfeeding until 24 months of age;
- Increased food after a child illness; and,
- Hand-washing practices before food preparation and before feeding a child.

Indicators for each of these feeding behaviors have been added to the design of the project, and all but the indicator for exclusive breastfeeding, are modifications to the original application. Originally there were 5 indicators, which included two anthropometrical indicators (W/A; stunting), breastfeeding within one hour after delivery, exclusive breastfeeding, and vitamin A

rich foods; all, but the promotion of vitamin A rich foods and exclusive breastfeeding indicators, have been eliminated. (Please see MCSP matrix for new indicators). Notwithstanding these modifications in the design of the application, the same approach and activities remain.

Nutrition at the Household & Community Level

Two main approaches will be used to improve nutrition at the community level. First, CHWs will be trained in growth monitoring activities, so that they are able to weigh and measure children under 24 months on a monthly basis in their communities, identify malnourished children and provide nutritional counseling. The MCSP will stress that growth monitoring is a *tool* to determine which families need nutritional information and support, rather than a focus on the weighing of children per se. Through this process, CHWs will identify children who are below 80% weight for age or who have not increased their weight from the previous month as targets for supportive home visits. CHWs will be trained in the G-IMCI principles, which focus on appropriate child feeding (early initiation of breast feeding, exclusive breast feeding for 6 months, appropriate introduction of weaning foods, continuation of breast feeding until 24 months, and feeding of the sick child during and after illness). By involving caretakers in assessing their children's growth progress, and carrying out home visits for malnourished children, CHWs will promote increased community awareness of child nutrition. CHWs will also emphasize the importance of increasing feeding of children during and after an illness.

The extremely low exclusive breast-feeding rate in the project area will be further investigated through an ethnographic study, which examines barriers to breast-feeding. This will be undertaken during FY 2003. A household census to identify pregnant women and mothers with children under 6 months of age will be carried out in order to identify a sample for this study. The results of this study will inform the project staff on the different reasons 'why' the women do not EBF. This information, if not present, will be incorporated into the current CRS/Kenya Nutritional Counseling Cards. It is envisaged that one way of addressing the issue of exclusive breastfeeding for infants under 6 months will be through an approach utilizing principles of positive deviance such as mother-to-mother support groups.

CHWs will spearhead the dissemination of messages at the community level to address many of these poor nutritional practices during follow-up home-visits for children identified with growth faltering or under-weight. At the community level, activities will also include dissemination of messages during monthly growth monitoring sessions and during breastfeeding mother-to-mother support groups. Annually there will be a "community child health day" during which in addition to other public health activities, a "message theme" will be conveyed to communities.

After development and identification of key messages, extension workers will be trained in communication strategies, supervisory skills and tools, and the BCC program by the project coordinator (DSSD) and program manager (CRS). Subsequently, the extension workers will conduct trainings for community health volunteers in the utilization and implementation of the BCC program. The extension workers will supervise the activities of community health workers of the BCC activities on a monthly basis. This supportive supervision will use "check lists" specifically designed to address issues during the communication process of message delivery. Refer to the CHW supervision for more details.

The second community approach to combating malnutrition relates to the training of mother facilitators on how to support peers to initiate and sustain exclusive breastfeeding (up to 6 months) through breastfeeding mother-to-mother support groups. At the health facility level, CRS personnel in conjunction with staff from the Ministry of Health will implement “Training of Trainers (ToT)” trainings on breastfeeding mother-to-mother support groups. The MCSP is not creating new groups, but building on already existing community women’s groups (i.e. church group). Through community meetings, the trainers will identify and work with these groups to explain the purpose as well as allow the group to elect a group facilitator. The ToTs will train the breastfeeding mother-to-mother support group facilitators. These support groups will enable experienced women to model optimal practices related to good health and nutrition, share information and experience, and offer support to other women in an atmosphere of trust and respect. This will be an important project strategy to reinforce informal, traditional support systems that are weakening in the project area. These groups will also provide advice on locally available foods appropriate for complementation, the importance of vitamin A foods available locally, the importance of continued breastfeeding up to 24 months, frequent feeding, the importance of feeding during illness, and hygienic practices specific for hand-washing before food preparation and before feeding a child. The MCSP will use the breastfeeding/lactation management curriculum already adapted by CRS from LINKAGES. The extension worker will carry out supervision of these community groups on a monthly basis. During these supervisory visits, the extension worker will use a problem solving approach to support and further strengthen these community support mechanisms.

For the messages relevant to hygiene practices, the MCSP Manager (CRS) will jointly review and adapt the existing “counseling cards” developed by CRS for the incorporation of two specific messages related to feeding practices and hand-washing. These messages will be aimed at caretakers to wash their hands before preparing food as well as before feeding children. These messages were added due to the KPC data, which indicated that less than one third of caretakers washed their hands prior to food preparation and feeding their child and a high prevalence of diarrhea.

Nutrition at the Facility Level

At the facility level, the project will support the training of health workers in assessing and classifying nutritional status according to IMCI protocols. Training will include providing treatment for children found to be malnourished counseling mothers of children who have feeding problems, and referring children who are severely malnourished for inpatient care after pre-referral treatment. This training will promote consistency between messages given to mothers on the community level and in the facility. Through the joint training, supervision and monitoring of the health facilities, the MCSP will work to reinforce improved referrals between CHWs and dispensary health workers to better coordinate care for malnourished children.

Vitamin A Supplementation at the Household & Community Level

The second objective in the nutritional component addresses vitamin A consumption by children under 5 years of age and post-partum women. The KPC survey 2003, showed that only 8% of post partum women and 19% in children less than 2 years of age had received Vitamin A supplementation. The health facilities currently gives Vitamin A to children as part of the immunization program and to women during post-partum visits. As the completed immunization

rate in this area is 62%, it is unclear at this point whether the low level of recording of Vitamin A supplementation is due to actual missed opportunities or whether there is generally poor card recording. In any case, as the growth-monitoring rate is so low after one year, the MCSP will need to address how to promote continued Vitamin A supplementation to children up to the age of 5 years.

Based on stakeholders' experiences, few mothers bring their children for growth monitoring after the primary vaccinations have been completed (See Graph 2). In addition, there is a lack of awareness that health workers should give Vitamin A outside the regular program, which links this administration to immunizations. Subsequently, there is low administration of Vitamin A after completed immunizations, Vitamin A capsules often expire before distribution. MCSP activities will focus on mobilizing communities to increase demand for Vitamin A supplementation at health facilities as well as decreasing missed opportunities at facility level according to the IMCI principles. The decision to focus on community mobilization instead of direct distribution in the community is based on the fact that the GoK does not allow CHWs to distribute Vitamin A in the community, although this is being reassessed. This approach will be reviewed at the MTE. If the strategy for Vitamin A distribution has been changed to incorporate direct distribution of Vitamin A by CHWs, this may then be incorporated into project activities. However it remains to be assessed whether community distribution will be more sustainable than supporting current MOH services for Vitamin A supplementation.

Review of growth monitoring cards of children 6 to 23 months old during growth monitoring sessions will identify those who have not received doses of vitamin A in the previous six months. Following the referral, CHWs will make home visits to caretakers with children who have not received Vitamin A to either congratulate the caretaker on taking their child to the health facility or to further promote the importance of Vitamin A supplementation with a repeated referral to the health facility. Other activities related to this objective are: community census of children under 5 years old, dissemination of messages related to vitamin A benefits during growth monitoring sessions and training of CHWs on vitamin A supplementation.

In addition to Vitamin A capsule supplementation, the project aims to increase the amount of foods with Vitamin A to the everyday diet of the community. The indicator from the original proposal has been modified to promote the consumption of at least 2 types of Vitamin A rich foods. This will also be complemented by activities under the CRS Title II IHAP program that address the growing of Vitamin A rich foods.

Activity Changes

In the case of iron distribution in pregnant women, the project found two main limitations. Firstly, the added effort level in identification of pregnant women, notwithstanding the absence of a reproductive health component in the project; and, secondly, the national health policy limitations on distribution of drugs by community volunteers at the community level. Given these limitations, the stakeholders considered excluding iron supplementation to pregnant women within the current proposal revision.

Vitamin A Supplementation at the Facility Level

The MCSP does not have any major reproductive health interventions except for the promotion of VCT and PMTCT. The majority of mothers give birth at home and thus, unless they go to a health facility for postnatal care, which is rare, there is not a contact point for the administration of Vitamin A post partum. The MCSP will build on the high attendance of infants for immunizations to promote maternal Vitamin A capsule supplementation at the time the infant comes for the first vaccination which is within 8 weeks post partum. Other potential contact points for Vitamin A distribution to both children and mothers could be at National Immunization Days or at the annual community health days. Should government policy change and CHWs or TBAs be able to distribute Vitamin A at the community level. This will be reassessed.

Through joint MOH and DSSD IMCI training, supervision, and monitoring, Vitamin A distribution will be addressed and strengthened in order to assure that counseling and distribution of Vitamin A is consistently available.

E.3.3 Malaria (30% LOE)

The KPC baseline survey report on January 2003 implemented in the areas covered by the project (Gachoka and Mwea Divisions), reported a malaria prevalence of 45%, using fever as a proxy indicator, among the children surveyed. Only 2% of caretakers knew at least two methods of malaria prevention, with insecticide treated bed nets as a needed response for one of the two methods. Approximately half of the caretakers knew that bed nets could prevent malaria but only 17% of mothers and 10% of children under 5 years of age slept the previous night under an ITN. Less than one tenth of bed nets had been treated with insecticide in the previous 6 months.,

Table 6: Use of ITN

Prevention of Malaria	Reported Coverage
Use of bed nets	55%
Use of insecticide treated nets	5%
Caretakers of CU5 sleeping under an ITN the previous night	17%
CU5 sleeping under an ITN the previous night	10%

47% of caretakers surveyed knew that high fever and one other danger sign were signs of severe malaria. In the two weeks prior to the implementation of the KPC survey, 59% of caretakers with children under 2 years old with fever sought advice or treatment, predominantly from the nearest health facility. While only 20% of those treated were given appropriate treatment. Appropriate treatment is defined as treatment with the drugs: Fansidar, Amodiaquine or Quinine.

Table 7: Caretaker health seeking behaviors

Malaria & Appropriate Treatment	Reported Coverage
From appropriate health facility	59%
Sought treatment within 48 hours	57%
Given appropriate treatment	20%

Essential Elements

The project will address four key areas:

1. IMCI training with follow-up and supervision at the facility level
2. Education on ITN use and its importance, including improving access to ITNs through the sale of subsidized (socially marketed) ITNs at the community level
3. Better home management and identification of severe disease: Trained CHWs will assess, classify, and treat with SP and if severe, refer children with malaria to a facility.
4. Education of caretakers on prompt healthcare seeking behavior on the management of malaria

The malaria intervention will have three main objectives:

Objective 1: Improved caretaker knowledge and practice on malaria prevention

Objective 2: Improved caretaker health seeking behavior on management of malaria in children <5 years old.

Objective 3: Improved facility level management of malaria

Malaria at the Community Level

As described in the proposal, CRS will collaborate with PSI who is currently spearheading a national campaign for the distribution and selling of insecticide treated nets (ITN). The project will use PSI's already developed culturally appropriate materials, which are available in English and Kiswahili, for malaria prevention; additional MOH has materials for both prevention and promotion of caretaker health seeking behaviors will also be used. The PSI marketing materials will be used to promote the use of ITNs. MOH material will be reviewed and where appropriate, integrated into the CRS and DSSD development/use of IEC materials for the concepts of recognition of danger signs of severe malaria and subsequent prompt health seeking behaviors.

The MoH is currently in the process of finalizing C-IMCI strategies. CRS has given the MoH the CRS C-IMCI Facilitators manual²⁰ to assist in this process. Extension workers will facilitate the training to CHWs on C-IMCI strategies when this has been finalized by the MoH. The approach to malaria case management proposed within the MCSP is in concordance with the MoH policies. Therefore, CHWs will be trained in counseling of mothers on prevention of malaria through the use of ITNs as well as case management of the sick child. The CHWs will be equipped with SP for treatment of the child with signs of malaria. Experience has shown that CHWs are not able to leave their village for more than a week at a time. Therefore, the 10-day training will be split into two 5-day sessions. The timing of training will take into account harvesting which takes place in the project area from June- July. Therefore start-up activities for CHWs in those months are limited. After the training of the CHWs, each agent will be responsible on an average of 20 households with children under 5 years old. The CHWs will take the opportunity of monthly growth monitoring to also provide education on malaria.

Prior to the C-IMCI training, PSI will give a 1-day ToT training on ITNs to extension workers as per their already developed training curriculum. The extension workers will, in turn, be able to train CHWs on the use of ITNs using a curriculum already developed by PSI and supported by their marketing material for subsidized nets. Procurement of subsidized socially marketed ITNs at KSh 160 each will provide the CHWs with one means of sustainability as they will be able to sell the ITNs at 200 KSh each.

ITN Procurement

ITNs will be purchased by DSSD at a cost of KSh160. The extension workers will be responsible of providing the ITNs to CHWs. As the direct supervisors of the CHWs, the extension workers will give the first set of ITNs based on credit to the CHWs. The cost of each net is KSh 160. The CHWs will sell the nets at KSh200 at the community level with the incentive of keeping the KSh40 profit. CHWs will have monthly meetings with the extension workers, a record (including batch numbers) will be made on the number of ITNs sold. These will be reported back to PSI. The CHWs will give KSh160 for each net sold to the extension worker, who will then replace the nets sold by the CHWs. Approximately 225 CHWs will be trained over a 3-year period. Due to this strong emphasis with both project resources in training and supervision of CHWs, strategies used to both financially and psychologically motivate and sustain CHWs are being heavily focused on in the MCSP.

SP Drug Procurement

DSSD will coordinate with diocese health facilities in the project area that have access to quality low cost generic drugs through MEDS, for the procurement of SP drugs. Extension workers will organize CHWs into groups and each group will elect a leader who will collect the drugs with the extension worker initially from the nearest diocese health facility. Extension workers will stop going to the facility with the CHW leader once there is a partnership between the CHW leader and the health facility. Public transport for each CHW leader in each group will be worked out with the group and the extension worker supervising them. Transport should be supported by funds from the CHWs sales of SP and ITNs.

The original indicator within the proposal relating to pregnant women receiving SP intermittent treatment at community level has been omitted because it is not within current MOH policy to allow CHWs to administer SP to pregnant women. This can only be done at a health facility. As there is no major reproductive health objective in the MCSP, this indicator has been removed.

Redipping of ITNs

Redipping of nets every 6 months remains a difficult practice to instill and will be a priority for the MCSP malaria intervention. The ITN comes with a re-dipping package and thus the first dipping after 6 months is free and already in the hands of the ITN owner. This information will be reinforced from the CHW. Additionally, the HIS will allow for the CHW to identify when a family or group of families needs to redip their net. The CHW will be responsible for getting information to their families on where the redipping package can be bought after the initial redipping. Redipping also forms part of the focus of the PSI national mass media campaign.

Indicator Changes

Objective 1, Indicator 1: Increase from 2% to 50% caretaker knowledge on use of ITN and at least one other method of malaria prevention.

The proposal indicated that a change of 30% would be achieved. It was decided a larger target could be achieved with a KPC baseline of 2% and the corresponding MCSP activities in the malaria intervention.

Objective 1, Indicator 2: Increase from 17% to 30% of pregnant women sleeping under ITNs

Objective 2 Indicator 3: Increase from 10% to 20% CU5 sleeping under ITNs

The remaining two indicators of objective 1 describe increasing caretakers and CU5 use of ITNs. 20% was originally stated in the proposal and has been changed to a 13% increase for caretakers and 10% for CU5. Through PSI's experience with the national campaign, it was found that this behavior is difficult to change due to household sleeping patterns in which different members of the family sleep in different beds. This is why caretakers and children are measured separately. This implies that households may need to purchase more than one ITN, which bearing in mind the poverty in the project area, will be challenging. Specific messages to the community will be used to explain the importance of pregnant women and CU5 sleeping under ITNs. Due to the difficulty of this task, a 10% change is the proposed target for the project.

The second objective under the malaria intervention is to increase caretaker knowledge and practice on malaria prevention. As described previously, the indicator measuring SP intermittent treatment of pregnant women at the community level is omitted because MOH policy prohibits SP intermittent treatment of pregnant women at the community level. The focus of malaria prevention at the community level will focus on ITN use for both pregnant women and their children under 5 years old.

Objective 2, Indicator 1: Increase from 47% to 70% of caretakers of CU5 who recognize at least 2 danger signs for severe malaria to seek care within 48 hours

Objective 2, Indicator 2: Increase from 68% to 80% caretaker of CU5 with high fever who seeks care from a trained provider.

The second main objective under the malaria intervention is improving caretaker health seeking behavior for children under five years old with suspected malaria. As recommended in the USAID comments on the proposal, the indicators remained the same in meaning, but were reworded to be more specific for measurement purposes. The magnitude of change expected was modified based on the KPC baseline measurements. The indicator measuring caretakers of CU5 with fever who sought treatment was measured at a baseline of 68%. Since this indicator is already relatively high, a 30% increase would put the target at 98%. The team found this target to be unrealistic and reset the target to be 80% of the population or a 12% increase over baseline. The indicator measuring caretakers with CU5 with high fever receiving appropriate anti-malarial treatment had a KPC baseline at 20%. The proposal stated that a 40% increase would be the target. It was decided that a 30% increase over baseline or a total of 50% of the caretakers with CU5 receiving appropriate anti-malarial treatment was a more realistic target for this CS project.

Activity Changes

The second main objective under the malaria intervention is improving caretaker health seeking behavior on management of malaria for CU5. The activities involved with SP distribution have changed from those proposed in the MCSP proposal.

The original proposal mentioned the training of shopkeepers and traditional healers in the prevention, treatment and appropriate care seeking behavior for malaria. The KPC results do not confirm that these health care providers were major sources of care. Additionally, during the key

stakeholders meeting at both the national and district level, the MCSP was strongly discouraged by the MOH from working with shopkeepers and the traditional healers. The stakeholders felt that the majority of shopkeepers move frequently and that therefore training efforts would have little impact on shopkeeper practices in the project area. There was a consensus that while it is important to look at the where the caretakers are getting their drugs, it is also important to invest MSCP effort into an area which can be feasibly changed. The stakeholders expressed that efforts would be too costly and timely for a measurable outcome in this five-year project with little if no sustainability. Efforts will thus be focused on the community in general and CHWs.

Malaria at the Facility Level

At the facility level, improved management of malaria is based on the principles of IMCI and appropriate health workers practices. There was no change in this objective. For children under 5 years of age, this will be accomplished by the same activities described in the proposal. DSSD, MOH (PHMT and DHMT), and health facility staff will be trained on IMCI, using the standard training package as adapted by Kenya MOH. The basic first training (24 participants) comprises 11 days and is followed by a one-week facilitators training for 12 of these participants. These 12 participants will then be able to train the health facility staff in IMCI. This project will support two IMCI case management trainings. Also 12 participants will receive a one week supervision and follow up training.

An important component of IMCI involves supportive supervision about 6 weeks after training to see how health workers are managing sick children subsequent to their improved skills. The MCSP will coordinate this supervision with the DHMT and use the WHO/BASICS supportive supervisory model, which also includes a Health Facility Assessment component. Challenges and solutions that the staff can identify are recorded, all with an emphasis on improving the environment of service delivery for sick children. In facilities in which there is trained staff, the MOH will provide IMCI drug kits.

A meeting with DHMT addressing logistical planning, including specifics roles and responsibilities is planned for this joint training effort. The current plan includes CRS support with financial and technical resources for the IMCI training.

Supervision and monitoring of IMCI-trained health facility staff will be a joint responsibility between DSSD and the District MOH. In addition to the training, the facility healthcare workers will need access to appropriate and consistently stocked antimalarial drugs for treatment of children with malaria. A baseline health facility assessment (HFA) will be conducted in May to June 2003. The HFA will give the project a baseline on the equipment and drug supply in the facilities in the project area. Based on this assessment, CRS will assess if there is a need to advocate the MOH on drug supplies at the health facilities. Based on experience, anti-malarials have been depleted during the rainy season when malaria cases are high at the health facility. Therefore, planning for advocacy on improving drug logistics has been put into the timeline of activities. Specifics on how this can be addressed will be discussed with the MOH after the HFA is finalized and presented.

Community ownership of their local health facilities will be supported through specific training and subsequent follow-up of Dispensary/Health Center Health Committees (DHCs). This will

be conducted through DSSD and will start from July 2004 and continue through the life of the project.

In order to promote increased access of CU5 to the health facilities, links between the Community Health Workers (CHWs) referral system and the current health facility referral system will be developed. This will be accomplished by a thorough review of the current health facility referral system, followed by the development of the community referral system. This will be a joint effort between DSSD and the district MOH.

Indicator Changes:

The indicator used to measure facility level management of malaria in children under five in the proposal stated that there would be a 50% increase from baseline of CU5 treated correctly for malaria at the facility level. As stated in the USAID recommendations on this proposal, the indicator needs to be more specific to measure. This indicator was changed to an increase from the KPC baseline of 20% to the target of 50% of CU5 with fever receiving appropriate antimalarial treatment. The baseline KPC measured this indicator at 20% with appropriate anti-malarial treatment representing the drugs: Fansidar, Amodiaquine or Quinine. Upon further discussion, the original indicator of an increase of 50% as the target was considered too high. CRS and, the local partner, DSSD feel that it is more realistic to set this indicator at a 30% increase or 50% total of the health facility personnel able to correctly give appropriate anti-malarial treatment to children under five by the end of the project.

The indicator looking at pregnant women receiving anti-malarial treatment as part of ANC has been removed from the MCSP. The chosen IMCI training focuses on case management of children and will not focus on treatment of pregnant women. Additionally, the project feels that community activities in MCSP do not address the identification and follow-up of pregnant women at the community level. Since anti-malarial prophylaxis distribution to pregnant women is prohibited by MOH at the community-level, the project's concentration for pregnant women will be education and referral from the community-level to the health facility for SP treatment.

E.3.4 Pneumonia (25% LOE)

The KPC baseline survey report on January 2003 implemented in the areas covered by the project (Gachoka and Mwea Divisions), reported a prevalence of cough at 52% and fast breathing of 15%. Approximately 52% of children with cough and/or fast breathing sought healthcare advice or treatment. However, only 3% had sought this healthcare within 24 hours of the symptoms.

Table 8: Percent of caretakers who sought healthcare within 24 hours for ARI danger signs

ARI symptom	Reported %
Cough and/or fast breathing	52%
Sought health care within 24 hours	3%

When asked, 5% of caretakers could correctly identify fast breathing and one other danger sign of pneumonia as signs that required seeking care immediately. 80% of caretakers reported seeking care at health facilities for their child with cough and fast or difficult breathing.

Essential Elements

The project will address three key areas:

1. IMCI training with follow-up and supervision at the health facility level
2. Community health workers will assess and refer children with danger signs of pneumonia to the nearest government or mission health facility
3. Education of caretakers on prompt healthcare seeking behavior for pneumonia danger signs

The pneumonia intervention will maintain the two original proposal main objectives:

Objective 1: Improved caretaker health knowledge of and treatment of CU5 with pneumonia

Objective 2: Improved health worker management of pneumonia in CU5

Pneumonia at the Community Level

Similar to case management of malaria, CHWs will be trained on danger signs of pneumonia. The MOH policies, however, do not currently support the treatment of pneumonia by CHWs although this might be revised when the MOH develops a G-IMCI strategy for Kenya. Until this is released, the MCSP will continue to enforce the current MOH policies. The focus of CHWs will be to educate mothers on danger signs of pneumonia and the need to seek healthcare from a MOH or Mission health facility within 24 hours. The growth monitoring services provided monthly by the CHW will have health-focused topics at each gathering. One of these topics will include recognition of danger signs and prompt care seeking behaviors.

Indicator Changes:

Objective 1, Indicator 1: 20% increase of caretaker of CU5 who are able to correctly identify at least 2 danger signs of pneumonia that require seeking care within 24 hours (Must name difficult or fast breathing as one of the two signs)

Objective 1, Indicator 2: 20% increase of caretaker of CU5 with cough and fast and/or difficult breathing who sought treatment from HF within 24 hours

Objective one for pneumonia is improvement of caretaker health knowledge of and treatment of CU5 with pneumonia. Indicator 3 referring to caretakers reporting that a full course of appropriate treatment was given was removed. Since CHWs under MOH policy are not allowed to give treatment for pneumonia, it was felt that this indicator at the facility level is measured through objective 2, indicator 1 by measuring the health worker management of CU5 with pneumonia.

Activity Changes:

As described in the malaria intervention section on activity changes, shopkeepers and traditional healer trainings will not be incorporated in the MCSP.

Pneumonia at the Facility Level

The activities for strengthening the case management of pneumonia remain the same as presented in the proposal. Specifics on these activities are described under the malaria intervention. These activities include IMCI training of the health facility staff as well as follow-up, supervision, and regular monitoring. CRS and the DSSD will support the MoH's current initiatives with these activities through both technical and financial support. DSSD will support the DHCs with training on logistic and financial management of drug procurement. There will be a joint effort with the MOH to integrate the community HIS with the current facility system. An emphasis in the development of this HIS will be put on the referral methods at the community and facility levels.

Indicator Changes:

Objective 2, Indicator 1: 60% of healthcare workers in health facilities to appropriately classify and treat pneumonia in CU5.

The proposal had an indicator that measured facility healthcare workers managing children with appropriate IMCI protocols. The indicator was made more specific to measure the IMCI protocols for pneumonia classification and treatment and the target of 60% remained the same.

E.3.5 HIV/AIDS (15% LOE)

In Kenya about 10% of the reported AIDS cases occur in children under five. Most of these cases are due to mother-to-child transmission of HIV-1. Around 100,000 infants and children are living with HIV in Kenya and many more have already died of AIDS. The KPC baseline survey indicated that HIV awareness is high (98%) although a smaller proportion (59%) had heard about VCT. This is not surprising since there is no VCT Center yet in the two Divisions, although there are plans by the MoH to set up two new sites soon at two health facilities in Kiritiri (one of the sites proposed for a VCT site) and another in Siakago. Keeping in mind that there are currently no VCT services in the area, the KPC survey also revealed that 64% of mothers would go to a hospital for an HIV test compared to only 2% who would go to a VCT site for a test. This is understandably a low percentage, since the concept of VCT is quite new and very little promotional campaigns have occurred in the two target areas to encourage mothers to seek a

comprehensive testing service that would also provide them with referrals to a health facility for other support services that they may need.

Given that the HIV prevalence rate in Mbeere is currently estimated at 25% compared to a national adult prevalence rate of 11%, it becomes imperative that attention is focused on supporting and promoting VCT services as an entry point to reducing maternal transmission of HIV.

Essential elements of the HIV/AIDS Intervention

The MCSP will address 2 key areas in this intervention:

- Promotion of voluntary, confidential counseling and testing (VCT) services among WRA and their partners and improvement of WRA access to VCT services through the establishment of two functioning VCT sites.
- Increasing awareness of WRA on PMTCT and the provision of ARV prophylaxis for HIV Infected pregnant women

Objectives

The previous HIV/AIDS objectives have been modified to:

- Improved access of WRA to VCT services
- Improved access to PMTCT services for HIV+ pregnant women.

The above two objectives replace the original proposed two objectives, which were:

- (1). Improved knowledge of WRA in prevention of HIV/AIDS and PMTCT; and
- (2). Increased availability of VCT facilities and PMTCT services.

These objectives, and the indicators proposed to measure these objectives, have been revised in the DIP based on discussions held with key stakeholders on the KPC findings. From the KPC results, it is quite clear that the HIV/AIDS interventions need to focus on increasing mothers' access to VCT services and subsequently to PMTCT services, since knowledge about the existence of HIV/AIDS and mother to child transmission was high amongst mothers. For example, 98% of WRA knew about HIV/AIDS; 66% knew the main routes of avoiding HIV infection; 77% knew that HIV could be transmitted to the baby during pregnancy; 72% - during delivery and 69% - through breastfeeding. Interestingly however, only 48% believed MTCT could be prevented; only 4% were able to correctly identify the reason why it is beneficial to know one's status during pregnancy and more important, only 1% felt that pregnant mothers needed to be tested.

Hence the approach taken in these HIV/AIDS interventions is to strengthen knowledge of mothers on the importance of VCT and PMTCT and increase their access to these services. This is reflected in the revised objectives and indicators. It is believed that there will be good uptake

to such services as 87% of surveyed mothers said they would access these services if offered to them.

HIV/AIDS activities at the Community Level

Activities at community level will focus on community mobilization and sensitization to HIV testing. This will involve addressing the issues of denial and stigma in the community which impacts on the uptake of HIV testing, the disclosure of HIV test results to sexual partners and families and on desired changes in behavior after testing. This will help maximize coverage of women, promote couple testing, male involvement, disclosure and uptake of VCT/PMTCT services. Strategies available include community meetings and IEC campaigns. The objectives of the community level activities will be to prepare the community for the MCSP interventions as well as promote visibility of the VCT/PMTCT services in the community. Communities will be sensitized to understand that PMTCT is a routine part of ANC, where a mother supported by her spouse and family takes standard steps including VCT, testing, taking ARVs if necessary and making an informed decision about infant feeding to have a healthy HIV free baby.

The MCSP project will work closely with the District AIDS and STI Coordinating Office (DASCO), local opinion leaders, church leaders, and other key community stakeholders in the target areas to ensure that these groups understand the importance of and benefits of women in particular knowing their status. After an initial orientation of these community leaders on VCT/PMTCT other community activities will include:

- Providing information on VCT/PMTCT in the context of HIV/AIDS prevention education in community forums such as monthly chief's *Barrazas*;
- Generating community discussions on VCT/PMTCT through other forums such as Mother-to-mother support groups;
- Giving speeches and making public statements that encourage their congregations, clan members and community members to access and utilize VCT sites particularly if they are WRA;
- Providing information and involving men at community level so that they will be encouraged to come for HIV testing themselves and also bring their wives testing, especially if they are pregnant.

In addition to these events, other planned activities at the community level include Annual Community Open Days as well as participation in the Annual World AIDS days activities organized each year on December 1st. The challenge here is to develop and disseminate key messages that emphasize the importance of knowing one's HIV status particularly WRA and the importance of accessing VCT services. The MCSP Project Coordinator will be responsible for coordinating these activities. Other activities to promote VCT services in the community will include liaising with PSI and NASCOP to advocate for the placement of billboards and other VCT promotional campaigns in Mbeere District. Once the VCT site has been established and registered with NASCOP, an official project launch will also take place. This is planned for October 2003.

Identification and training of community health workers in C-IMCI to support health education in general at the community level will also incorporate modules on HIV/AIDS and specifically community education on the benefits of testing. Trained community health workers will be

responsible for community education on HIV/AIDS. The MCSP will also utilize cross training and visitations between CHWs to support education and prevention efforts. Other materials obtained from NASCOP, the Kenya AIDS Society and other NGOs will be reviewed and used as appropriate. Additional promotional items might include caps, bags and t-shirts which combine messages relevant to the MCSP

Throughout the implementation of the project activities, the project team will work to involve the MoH, the DASCOS District AIDS & STI Coordinator, members from the Constituency AIDS Control Committee from the Office of the President, community leaders, educators, and institutions, to ensure community ownership of the services that are provided. They will also be requested to participate in quarterly review meetings, needs assessments, take part in planning for activities; as well as participate in relevant training sessions. The promotion of the VCT services has to be an ongoing activity. These educational efforts at community level will be important to open up dialogues on how knowing one's status can be empowering, lead to health lifestyle changes and protection of loved ones (including the unborn child).

At the health facility level, VCT messages can be incorporated into the bi-weekly health talks and the VCT counselor once trained can take the lead on this.

VCT activities at the Facility Level

As part of the MCSP activities, two VCT sites will be piloted in the two target divisions using a phased approach. VCT services will be made available in already existing health facilities and be integrated into activities as opposed to stand-alone VCT sites. Beginning in April 2003, the MCSP project team will initiate the process of setting up an operational VCT site in Mwea Division in a health facility that will be identified by the DHMT. During the second half of the project, a second VCT site will be selected according to DHMT priorities in Gachoka, so that a minimum of two VCT sites are functioning in these two divisions by the end of the project. These activities will contribute to the NACSOP goal of setting up 5 VCT sites in Mbeere District by 2005. Establishment of a full functioning VCT site takes up to six months and activities here include selection of site and staff, training, and maintaining a quality service. Steps are as follows.

Selection of VCT site

To discuss the selection of the VCT site and staff as well as proposed VCT activities, the DSSD Development Coordinator will arrange a meeting with of the Project Technical Team (partner team plus CRS MCSP manager) and the PMO of Eastern Province in April 2003. The objective of this meeting is to gain and ensure MoH/GoK commitment and institutional ownership for the activities, to prepare the health system for the activities, and to identify possible opportunities and constraints to the implementation of this service from the PMO's standpoint. It is very important that the PMO endorses the need and demand for these activities in the Province to ensure a smooth start-up process and subsequent project implementation.

Following the meeting with the PMO, another meeting is planned with the Mbeere District Medical Officer of Health (MoH) and the District Health Management Team (DHMT) in April 2003. The objective of the meeting will be to identify a health facility that will house the VCT site. Minimum MOH requirements are for 2 counselors per site. As there will be no inducements

or incentives, self-motivation will be a key factor in the selection of staff for this activity. Involving the DHMT early will also ensure that the health center in-charges are committed both to the release of the staff members and to support the ongoing process.

Training

The project ultimately will train between 4-6 counselors. At this point there are no experienced counselors in the District, and only a limited number of counselors in the Province. Minimum site requirements are for 2 counselors who have undergone 120 hours of training as defined by the national curriculum. Within the counselor training there are also modules on community mobilization and quality assurance which will support the community sensitization activities identified above. Strategically as laboratory personnel need to supervise rapid testing by counselors, one person from the laboratory should also be trained in VCT. The MCSP will support staff training run by the Liverpool School of Tropical Medicine which has been one of the leading training groups in supporting the government in the establishment of VCT centers. The next training course is in September 2003.

The role of the VCT counselor is to:

- Mobilize the community around VCT awareness
- Provide prevention HIV/AIDS counseling
- Provide information on HIV/AIDS
- Conduct Rapid HIV tests
- Liaise with other health care providers and VCT sites in the district if any
- Make referrals for appropriate services within the facility, particularly to the PMTCT services
- Attend on-going training and support supervision
- Record confidential information as required
- Take part in quality assurance
- Set up post test clubs when appropriate

In the absence of experienced counselors in the project area, initial counselor supervision will be undertaken by The Liverpool School of Tropical Medicine through their Eastern Provincial Manager who is based in Embu. This supervision will comprise monthly or bi-monthly supervision sessions. The role of the counselor supervisor is to:

- Provide counseling support to the VCT counselor to the case load of VCT clients,
- Provide regular support supervision to the counselor
- Conduct regular site visits
- Identify challenges in service delivery
- Ensure quality assurance

As counselors become more experienced, a counselor supervisor will be identified who will undertake a 3-month supervision training course.

Establishment of VCT services in selected site

Once the staff have been selected and trained, and the site has been identified, equipment and furniture will be purchased for establishing the VCT service after which NASCOP will inspect

and register the site. In addition to minimum staffing, other site requirements include a private room with hand washing facilities, a lockable storage area to store test kits and a regular supply of test kits. Test kits can be obtained from the regional Kenya Medical Supplies Authorities. In order to renew supplies of test kits, the District Laboratory Head Technician collects used kits and returns these in exchange for re-supply.

The testing strategy that will be used at the site will be the “Opt Out” strategy where clients will have the opportunity to opt out of testing following the pre-test counseling session. This will ensure that clients do not feel coerced into testing.. Testing will be done with rapid test kits that are provided free by the GOK and available through NASCOP. They are much quicker and easier to use and do not need highly trained staff or expensive laboratory equipment. Positive tests will be confirmed with a second rapid test.

Prevention of Mother to Child Activities at the Facility Level

Prevention of mother to child transmission activities at the facility level will include the provision of Nevirapine Prophylaxis to HIV positive pregnant women and their infants. The KPC survey indicated that over 90% of pregnant women make at least one antenatal visit and 51% make at least 3-4 visits. Information on HIV, VCT and prevention of mother to child transmission will be incorporated into the regular antenatal education programs .

Training: Selected nurses and midwives will receive PMTCT training that will be provided by an experienced external facilitator. The PMTCT curriculum is currently under revision.

The PMTCT program requires a pro-active approach whereby all pregnant women are actively counseled about the benefits of HIV testing. This includes providing all pregnant women with the information about the benefits of testing in pregnancy. If selected nurses and midwives who receive the PMTCT training do not have these counseling skills then they will be trained in providing information to mothers on the benefits of VCT etc.

To increase male involvement, the information on PMCT will be given to men directly and not through the women, to encourage them to come to the clinic with their wives. This has worked in Zambia and parts of Kenya where PMTCT trials have taken place. In Kenya in April 2003, a mass media campaign is about to be launched that will promote couple testing. IEC materials that address, discuss and promote male involvement will be adapted from those developed by NASCOP and other NGOs and made available at the clinic to boost the number of couples visiting the ANC clinic together. Also, leaflets and posters in the local language emphasizing the importance of couple testing and the benefits of testing in pregnancy will be made available in the ANC clinic, the delivery rooms and other areas used by pregnant women in the health facility. Some of these can be obtained free from NASCOP

Antenatal counseling on PMTCT is a difficult and time-consuming process. Suggested minimum standards of PMTCT services includes the need to provide antenatal counseling sessions of an average of 30 minutes per visit. Information on infant feeding options will be also given to HIV positive mothers so that they can make informed choices.

Administration of Nevirapine-NVP Adult dose

Once mothers have gone for VCT and have tested positive, they will be enrolled in the PMTCT program and ARV prophylaxis provided for them in addition to routine antenatal care. With the majority of mothers delivering at home, Kenyan National guidelines stipulate that HIV+ women who are 28 weeks or more in their gestation be given a tablet of Niverapine for self administration in the event of going into labor. Women are asked to self-administer because the earlier it is taken in active labor the more effective it will be. Should the mother's dose of niverapine be taken within two hours of delivery the baby should be given an extra dose of niverapine immediately after delivery with a normal dose between 24-72 hours after delivery. Should the mother take niverapine without going into active labor she should be provided with a second tablet of niverapine. All midwives, nurses working in the wards need to enquire and ensure that all HIV positive women in labor have correctly self-administered their niverapine tablet and if not to administer niverapine at the time.

Administration of NVP- Infant Dose

The national PMTCT guidelines stipulate that the babies of HIV positive mothers receive a dose of niverapine suspension between 24 and 72 hours after delivery. If the mother only received her dose within two hours of delivery, the baby should actually receive two doses of NVP. If women deliver in the hospital, drug charts and patient case notes should clearly indicate to post natal staff which infant is to receive niverapine before discharge or within 72 hours of delivery.

Quality Assurance

Quality assurance mechanisms for monitoring PMTCT will be implemented at different levels and includes internal monitoring, interviews to determine client satisfaction, monitoring of niverapine administration and procedures, district-level monitoring and external monitoring. Adapting and integrating existing supervision checklists will standardize supervision..

Challenges

The MCSP project team is well aware of the complexities of implementing a PMTCT program. Through its discussions with FHI, Pathfinder, KANCO and other service providers of PMTCT, some operational difficulties have been identified. Although mothers can be provided with their dose of niverapine to take at the onset of labor, most providers noted that because majority of mothers deliver at home, the infant is not being brought to get its infant dose within 72 hours.

Other challenges include how:

- To improve the quality of ANC services by ensuring all components of the package are offered to women;
- To increase the uptake of VCT through referrals from the ANC;
- To increase the uptake of PMTCT interventions by HIV positive women;
- To provide a comprehensive package of care to HIV infected women and their families;
- Male partner involvement; and
- Changing health-worker attitudes in ensuring male-friendly ANC services.

Quality Assurance

HIV counseling and testing is a difficult and time-consuming process. Suggested minimum standards for counseling includes the need to provide an average of 45 - 60 minutes per client for the initial pre and post-test counseling together with the testing time. It is advised by NASCOP that the counselor supervisor and the DHMT conduct weekly support supervisions for the first two months post service establishment and then bi-weekly thereafter. VCT counselors also need to maintain a good working relationship with the rest of the health facility staff and maintain good interdepartmental relations. They also need to be encouraged to strengthen their network and linkages with other providers to promote referrals for the VCT services.

Conditions that are conducive to successful testing facilities and which will be promoted through the MCSP include:

- Referral systems are in place and fit into the larger health center management system;
- Daily facility health facility talks include a session on VCT;
- The counseling room is comfortable and private;
- Services are client-centered, rapid, reliable and fully confidential;
- There is an adequate supply of test kits from NASCOP;
- The Health Facility has ongoing clinical care services to which clients can be referred;
- There are strong linkages between VCT staff and staff in Health Facility involved in the PMTCT component; and,
- Regular facility based discussions address confidentiality issues and referrals

The project will support staff attending a 2-day quality assurance workshop which is run bi-annually by the Liverpool School of Tropical Medicine. Members of the DHMT, in-charges at health facilities and VCT counselors will also be encouraged to attend this course.

MOH supervision includes monthly reporting of service data to DASCO and annual monitoring and supervision/registration of the site by NASCOP. The project will also encourage supportive supervision by the Counselor Coordinator. In addition, client exit interviews on a six monthly basis should be organized through Health Center/District Health committees who identify community volunteers who carry out client exit interviews completing a pre-designed form.

Figure 2: Flow Diagram of VCT Activities

